

THE MEDICAL AND SURGICAL REPORTER.

NO. 1976.

JANUARY 19, 1895.

VOL. LXXII—No. 3

ORIGINAL ARTICLES.

OBSERVATIONS UPON THE CHARACTER AND MANAGEMENT OF TYPHOID FEVER.*

C. Z. WEBER, M.D., NORRISTOWN, PA.

Reviewing the records of cases treated during a period of now almost twelve years of continuous practice in this community, I find that in the treatment of this malady I have obtained results sufficiently satisfactory to warrant me in presenting them briefly for your consideration.

Typhoid fever, now universally recognized as a germ disease, self-limited probably as to length of duration, highly infectious and slightly, if at all, contagious, presents features somewhat varied in character according to the geographical location in which it is found.

Upon reading numerous authors who have written voluminously upon this subject, the conviction is forced upon us that in this locality at least we do not encounter the disease in its most virulent, if in its more nearly typical, form. True, "walking cases" such as we occasionally meet with here are described also by these authors, and upon the other hand, we are careful to take cognizance of the cases in which serious brain symptoms accompany the early stages of the disease; but the grave course usually ascribed to the disease is found in only a comparatively small number of our cases. With refer-

ence to the milder class of cases, however, I firmly believe that wherever the disease prevails, cases occur more frequently than we are wont to admit of a type so mild and obscure that their true nature is not discovered by either family or physician, and positive evidence of its existence is only betrayed by late manifestations. As an illustration, we are all familiar with the tendency of mild cases of scarlet fever to run a course unobserved until albuminuria or dropsey manifest themselves to the medical attendant, whose suspicion is corroborated by an outbreak of other cases in the family or neighborhood by virtue of the active contagion that attaches to this affection.

For a clearer elucidation we may be pardoned for introducing the following classification of the varied forms of the disorder under treatment, given in the order of their frequency:

SUMMARY.

Uncomplicated* cases,	47
Abortive cases,	4
Walking cases,	4

* We use the term "uncomplicated" here synonymously with "typical," by which we refer to those in which the disease runs a comparatively typical course extending over a period approximating four weeks, at the expiration of which the evening temperature first registers at 98.4° F.

*Read before the Montgomery County Medical Society, November 7, 1894.

Cases complicated with inflammatory rheumatism,	
" "	malaria,
" "	neuralgia,
" "	bronchitis,
" "	hemorrhage,
" "	intercurring pregnancy,
" "	pneumonia,
" "	general muscular cramps,
" "	la grippe,
" "	extra length of duration,
" "	persistent subnormal temperature,

The management of these 78 cases resulted in 75 recoveries and 3 deaths. Of the deaths, 2 occurred in the class of "walking cases." Death No. 1 occurred July 6, 1886; presented the following history: Male, aged twenty-two years, nativity a Swede, occupation glass-blower, married. First saw him at my office June 29, 1886. He consulted me for something to cure "malaria," as he termed it, his complaint being that he had been obtaining office treatment from several physicians for the past two weeks, without apparent benefit to himself. He had been following his employment daily during this period. He complained of a general tired feeling, not improved by his nightly rest. He was ambitious to receive an unbroken month's pay, as this was the last before the annual shut-down in his line of business, and he stoutly maintained that he was not too ill to work. Obtaining a history of slight diarrhoea at times, occasional epistaxis, more or less headache, which he had been regarding as malaria, I took the temperature and was surprised to find it out of all proportion to both his subjective and objective symptoms. The thermometer registered 104.5° F. Succeeding, temporarily at least, in impressing him with the gravity of his condition, I advised him to go home and take to his bed, promising to visit him the following day. Under treatment and liquid diet for several days his condition improved so much that, becoming rebellious against confinement and restricted diet and at the same time distrustful, he insisted, after the lapse of four or five days, upon dressing and going downstairs; and in utter disregard of warning as to probable consequences, in order to prove that people are sometimes not as sick as the doctor makes them out, he threatened to join his family in a good square meal then in course of preparation, consisting of chicken pot-pie and seasonable vegetables. This occurred at my

morning visit, and as I was growing tired in my efforts to convince a man that he was sick, after taking his temperature, which I found at 102.5° , I gave him formal notice of my immediate retirement from the case, and the patient was left to shoulder the responsibility of his venture.

Just after midnight of the same day I was recalled to the case, as he was reported suffering from intense pain in the abdomen, and it was feared he was in a critical condition. Upon reaching the bedside I found the patient in most agonizing pain; the body bathed in a profuse cold perspiration; a feeble rapid pulse, if a pulsation could be said to exist at all; a greatly distended abdomen; the countenance anxious and changed almost beyond recognition; in fact, every indication that a perforation of the bowel had taken place. He presented a sorry contrast, indeed, with the defiant, venturesome, though foolhardy man of a few hours before. He had partaken of the injudicious food, and under the circumstances the only thing to be looked for was the certain death which followed in a few hours. A post mortem was denied, but there could be no doubt as to the cause of death.

Fatal case No. 2 presented the following history: Young man; single; aged seventeen; apprenticed to the carpenter trade, which employment he was following daily. Having an annoying headache and feeling unusual fatigue from his daily work, he availed himself of office advice and treatment from two physicians for upward of a week. His objective symptoms, a lack of energy and depressed spirits, strangely associated with an inordinate appetite, very naturally aroused the anxiety of his parents, who summoned me to see him at the end of his day's work. He had just finished a hearty supper, such as is usually provided for a laborer who is accustomed to subsist upon cold dinners. He informed me that he was not feeling very sick, and in his opinion he only needed rest, as the weather had been warm and the work unusually hard for the past week. Upon questioning him pointedly I obtained a *suspicious* history, and was astonished to find his temperature to be 104° F. He was ordered to bed forthwith, the diet restricted and an antipyretic administered at regular intervals. A light dose of castor oil was ordered for

the following morning, to be taken fasting, with view of correcting a slightly painful diarrhoea and also ridding the alimentary tract of any offending material most likely to have been ingested.

A slight reduction in the temperature followed. The antipyretic in small doses was continued tentatively until a diagnosis could be reached. All was now so well that upon my visit August 17th, having been first called August 14th, there was a strong probability that the typhoid fever view was erroneous. Upon the following day, however, I was hastily summoned to the house. Upon making an examination I found the patient in a condition of collapse, having complained an hour previously of a severe and sudden pain in the neighborhood of the umbilicus. A hypodermic injection of morphia with atropia was administered, and upon returning to the bedside about one hour later there was revealed a greatly distended abdomen, and while the character of the circulation was slightly improved it proved to be but temporary, his condition growing rapidly worse, death resulting early the following day. A post mortem disclosed a perforation of the bowel, as was suspected from the symptoms exhibited.

Death No. 3 occurred in a female, aged forty-six, on the fourteenth day of what had been a case of moderate severity, as temperature had not registered above 103.5° even during the first five days of the attack. In this case it was not found necessary to push the antipyretic treatment after the first few days. The immediate cause of death here was paralysis of the heart induced by exhausted vitality, the combined result of grief, the climacteric period and typhoid fever.

We would divide the treatment of typhoid fever into two periods, viz.: that conducted while arriving at a diagnosis and that employed in the treatment of the disease proper.

As a means of establishing a diagnosis a reliable thermometer is of incalculable value. Whether consulted at office or visiting at patient's home, the practice of taking the temperature is absolutely indispensable. In this age of criticism I would greatly prefer to be ridiculed for the excessive use of the thermometer than be charged with any one of the sins of omission that might be attributed to neglect. If a temperature of 102° or thereabout is

found to be present, accompanied with symptoms of general malaise, loss of appetite and evidence of greatly impaired nutrition; with a history covering a period of from several days to as many weeks of a general broken-down state of health; with irregular periods of diarrhoea and constipation; inability to sleep at night and an inclination to sleep in daytime; more or less headache; if not a decided chill, then chilliness; a coated tongue and its concomitant a bad taste; bad state of the mucous secretion, especially in the nasal region where rupture of the capillaries (epistaxis) takes place, etc.—with this array of symptoms I am at least suspicious of typhoid fever. If the bowels have not been freely moved some time during the preceding twenty-four hours, one grain of calomel is administered, followed in from two to four hours by a saline, as for example one-half to a teaspoonful of Epsom salts or a Seidlitz powder. With a view to eliminate the possibility of the presence of intermittent fever, two hours after the administration of the saline quinia is commenced with and continued in from two to five grain doses until twenty grains in all are taken. This should be managed so that twenty grains are administered in as many hours from the time the temperature was taken. If at the next visit the bowels are found to have acted with inordinate frequency, a point in diagnosis in support of your suspicion is established. Further, if the temperature is found to be higher by a degree or more than twenty-four hours previously, the suspicion may be presumed to be still further founded upon fact.

Notwithstanding the increase of fever, the treatment so far may have produced such an amelioration in the subjective symptoms that the patient feels that he is ready to return to his employment. The temperature may now be found to approximate 102.5° perhaps, and we find ourselves confronted with "a fever." So directing the patient to bed we commence with an antipyretic in doses sufficient to control the temperature, while we wait for several days to further corroborate our suspicioned diagnosis by the appearance of "rose-colored spots" or other unmistakable signs of typhoid fever. In the meantime our antipyretic treatment is being supplemented by having the patient's body

sponged with tepid water as frequently as the surface becomes hot and dry, and during this interval also a grain of calomel, followed as often with a saline laxative, is given on alternate days with a view of clearing the alimentary tract so far as practicable of its probable obnoxious contents.

The antipyretic we have been employing thus far is salicylate of soda, a remedy without which, in the light of our observation and experience, we would feel greatly handicapped in assuming the responsibility of the management of a case of typhoid fever.

The physiological action of this remedy being both *antipyretic* and *antiseptic*, we have at once an implement of warfare commensurate in a large degree with the destructive power of the enemy attacked.

Should you be deceived in your diagnosis, the treatment thus far pursued will have done no manner of harm to the patient, and nine times in ten, should you not be dealing with a case of typhoid, you will be surprised to find the patient's temperature gradually approach the normal and his convalescence brought about. It is but fair to state that even in what subsequently prove to be genuine cases of typhoid fever, about the end of the first week the temperature will sometimes be found to be at or even below the normal if taken in the early morning.

Should such a contingency occasion doubt as to the correctness of the diagnosis, it could be quickly dispelled by withholding the antipyretic until a later visit.

Should it be proven that you have been coping with genuine typhoid during this time, you have been passing through the most troublesome part in the management of the case. The anxious sufferer, in a greater or less confused state of mind, has been endeavoring to keep track of his business, but this interest in his personal affairs has gradually lapsed into an entire indifference with reference to his surroundings, while the family, prompted to action by their over-zealous relatives and neighbors, have been a unit as to your seeming stupidity in not being able to make a diagnosis upon your very first visit. And should you be so unfortunate as to be a recent graduate, while you may not have been openly asked to make an "unconditional surrender" of the case by the time the first crop of rose-colored spots exhibit

themselves upon the surface of the patient's epigastrium, you have felt nevertheless that your destiny in the case has been wavering in the balance of the family's dissatisfaction.

After much tribulation, so to speak, the diagnosis of typhoid fever is fully established. Some responsible person in the family or the sufferer's nearest friend is now informed of the opinion reached, whereupon we take pains to explain that in the course of this disease there are two dangerous symptoms likely to be encountered, viz., hemorrhage and perforation of the bowel, and we at once enlist the hearty coöperation of the family or nurse in the supply of nourishment safely suitable for the patient. Up to this point the patient has been supplied with a moderate allowance of water, but has taken very little in the way of diet.

For a period of several weeks, determined of course by the length of time the disease has already run, and as carefully persisted in for two weeks after convalescence is begun, the diet should consist solely of milk and meat broths with an occasional addition of light farinaceous desserts, specially cooked soft-boiled eggs, allowing plenty of pure, cold, but not iced water.

At this stage dilute hydrochloric acid is added to the medicinal treatment. So with salicylate of soda and hydrochloric acid on the one hand and with milk and meat broths upon the other, we proceed to fortify the patient against the ravages of the disease at the same time we lift up the barriers of vital force which enable him eventually to overthrow it.

In the administration of salicylate of soda, from eight to fifteen grains will usually be found sufficient to hold the temperature within safe limits. I am in the habit of employing the following formula:

Sodae salicylate.....	3 ss
Elix. potass. brom.....	
Syr. sarsaparilla comp.	3ij

M. Sig.: One-half to a teaspoonful every two to four hours.

The conjoined use of potassium bromide, five grains to the dram of the mixture, overcomes to some extent the slight ringing in the ears occasioned by the salicylate, besides exerting a favorable therapeutic effect upon the over-distended cerebral vessels.

I have always found it desirable to fix

the administration of the fever mixture at certain hours. Thus it may be given at the hours of 1, 5 and 9 A.M. and at 1, 5 and 9 P.M. If a thermometer be left with the nurse, the size of the dose to be given may be determined by taking the temperature at these stated intervals. At the discretion of the nurse also the doses due at 11 P.M. and 3 A.M. may be omitted as the medical attendant may advise. If the fever is running a mild course a half-teaspoonful of the mixture at the intervals stated will prove sufficient. A temperature of 102° to 102.5° F. is the limit above which it should not be permitted to run without administering proportionately increased doses of the antipyretic, supplemented of course with tepid-water sponging, which is found grateful to the patient's comfort.

The allowance of milk the patient is to receive should be given at least a half-hour before the antipyretic mixture, which enables both stomach and system to prepare for the coming dose. If a mild case is being dealt with salicylate may only be found necessary for its antiseptic effect, in which case it could be used every other time it would otherwise be employed; for instance, at 5 A.M. and the hours of 1 and 9 P.M. Assuming the hours for the administration of the salicylate to be fixed as above, the intervening even hours may be very systematically used for the administration of the hydrochloric acid and broths. They would therefore come at the hours of 3, 7 and 11 A.M. and at 3, 7 and 11 P.M. I usually employ about from ten to twenty minims of the dilute hydrochloric acid in a wineglass or more of water immediately after the injection of a cup of properly prepared broth, such as of beef, lamb, mutton or chicken, as the judgment of the nurse or physician may dictate. There can be no objection to the addition of a small portion of rice or barley to the broth if desired.

At the termination of the febrile stage and during the period of two weeks which should elapse before solid food could with propriety be allowed, semi-solids, such as baked potato with salt and butter, broiled, raw or stewed oysters with the eye discarded, stale bread or stale toasted bread without the crust and moistened with milk. Stale bread may also be allowed served with the milk dressing from fried ham or frizzled salt or fresh beef, the

juice from under-done roast beef or broiled steak, any of which will be greatly relished by the patient, who is now beginning to call your attention to the savory odors ascending from the family cook stove.

Arriving now at the end of the third or fourth week, the patient is ready to be assisted to a sitting position, if not to an easy-chair, when an uninterrupted convalescence is anxiously hoped for.

Additional treatment found necessary in the management of typhoid fever will obviously be symptomatic.

For restlessness three to five grains of Dover's powder will not only produce sleep, but tranquilize both mind and body as well. If diarrhoea is a feature of the case, this same remedy may be given in the same doses after each excessive movement of the bowels. Should there be troublesome delirium, from ten to thirty grains of potassium bromide will have a happy sedative effect.

Should constipation characterize the case—and I find this to be a feature in about one third of the cases—the only safe agents to employ are castor oil in about one-dram doses or a carefully administered enema.

In the cases in which hemorrhage occurred morphia was given at once hypodermically, and this followed at intervals of from two to three hours with from five to ten drops of deodorized tincture of opium until the period of danger was passed.

Of the three females whose cases were complicated with the pregnant state, two carried the foetus to full term. The third aborted one month after convalescence was established. Quickening should have taken place during the progress of the fever, but as it did not manifest itself the death of the foetus was suspected, which suspicion was in due time verified.

When typhoid fever was found complicated with other affections, such as rheumatism, bronchitis, intermittent fever, neuralgia, pneumonia, etc., these intercurrent maladies were combated with a line of treatment indicated for each when separately met with, modified as to agents employed and intervals of administration so as not to interfere or be incompatible with the treatment being pursued for the fever in hand.

As typhoid fever is known to be a highly infectious disease, the medical at-

tendant is not performing his whole duty to the family of the patient nor to the community without having made a thorough inspection of the premises and notably the water and milk supply of the family. While this may be too late to be of advantage to the patient, the health of the family or community may be in constant peril from the source from which the case in charge originated.

Ordinary fresh-burned lime as obtained from the kiln for building or other purposes, properly prepared, is a germicide of recognized power, and it also has the advantage of being inexpensive and therefore within the ready command of even the humblest home. This should be kept in two forms: the one is obtained by treating the lime with hot water until reduced to a proper consistence; the other with just

sufficient water to cause the lime to crumble into an impalpable powder. To destroy as far as practicable the poison germs in the dejections, the nurse is instructed to keep a bed-pan or a vessel charged with about a quart of the lime of about the consistence of thick cream in readiness at all times to receive the stools. This should be thoroughly incorporated with the lime by stirring before it is buried in the earth, which should be at a place safely remote from all sources of water supply for drinking purposes. The closet, if a well and used by the victim of the disease prior to his treatment, should be sprinkled and dusted with a liberal supply of the freshly slaked dry lime, and this process repeated at regular intervals until it can be emptied and the empty well disinfected in like manner.

OVARIAN CYST.*

E. E. MONTGOMERY, M.D., PHILADELPHIA.

In my clinical work before you during this year, it shall be my aim not so much to attract your attention by the operations that are done as to make a true exhibit of the work that should be done in the class of cases which will be met with in the gynaecological field. My aim shall be to teach you to save rather than to destroy, to restore to the normal condition rather than to sacrifice. The tendency of the present time is toward conservation rather than mutilation.

The first patient I show you is a woman sixty-one years of age; her father died at ninety-three, her mother of some lingering disease, and her maternal grandmother died of cancer of the face. She is married, has had eight children and one miscarriage. All her children are in good health. Her menstruation began at fifteen, the menopause occurred at fifty-one, and the present trouble followed. She suffers from lumbar pain, particularly in the right side. This has been much aggravated during the last six months, when the pain has been almost constant. From the lumbar region it has extended

over the abdomen. She has had constipation during her entire life; has gone at times days and even weeks without defecation. She suffers from a leucorrhœa which is increased of late; micturition is very frequent, sometimes passing urine as often as one hundred times in twenty-four hours. This urine contains blood and pus; the specific gravity is 1018; color light yellow; no albumen is present, but it contains blood-casts. She is somewhat emaciated, has lost considerable flesh and is weak and debilitated. As we look at her abdomen we notice that it is not regular and symmetrical, and there is that relaxation of the abdominal walls which we would expect present in a woman who has given birth to eight children. It is not surprising, consequently, to find the abdomen flattened out and somewhat irregular, even though there was nothing abnormal in the abdominal cavity. You will notice, however, it projects more especially on the right side. This projection is limited to the spaces above and below the umbilicus and is more prominent on the right side, so we do not have a symmetrical distention. If this distention were mere obesity we would expect to

* Clinical lecture delivered at the Jefferson Hospital.

find it characterized the abdomen alone and there would be more or less prominence, which would be situated at the lower part of the abdomen and would likely be symmetrical—that is, it would be the same on either side. In this patient, however, as she lies on her back, the distention of the abdomen is not symmetrical but is very marked to the right.

In any disease of the abdomen we take into consideration the fact that there are in the abdominal cavity certain viscera. Any of these viscera may give rise to growths which produce very characteristic symptoms. In order, then, to arrive at a definite diagnosis of the character of any growth and the organs by which it is affected, we mark out the abdominal surface by arbitrary lines into a number of spaces; thus we draw a line across the level of the eighth rib, another at the level of the highest point of the crest of the ilia. These lines divide the abdomen into three spaces; these are subdivided by a perpendicular line bisecting Poupart's ligament, which consequently divides the abdomen into nine spaces, from above and to the right and left hypochondriac and the hypogastric, and the right and left lumbar and umbilical, the right and left iliac and the hypogastric regions. In each of these divisions of the abdomen we recognize there are situated portions of different viscera. On the right above we have the upper part of the liver, the right kidney, the ascending colon, and on the left the spleen, the left kidney, the descending colon. In the epigastric region we have the stomach, the left lobe of the liver and the gall-bladder. We also have the colon, the small intestine, and in the lower portion of the abdomen in the hypogastric region we have the uterus and bladder, and on either side the ovaries and posteriorly the rectum. In the right lumbar region distentions may arise as a result of inflammation about the appendix or cæcum. In addition to the conditions named, we may have enlargement of the abdomen from the presence of growths in the mesentery and omentum or from retroperitoneal tumors. If a patient, then, presents herself suffering from an abdominal tumor, we endeavor by inspection and palpation to determine the portion of the abdomen in which it is directly situated. Having determined this, we take into consideration the viscera of that re-

gion and endeavor by a process of elimination to satisfy ourselves as to the particular portion of viscous involved. This tumor is situated altogether to the right of the abdomen; it consequently may be due either to enlargement of the liver, to a condition of the kidney, to malignant disease possibly of the ascending colon, a growth situated more particularly in the lower part of the abdomen, which may be determined also by vaginal examination, may arise from the ovaries or uterus or growths involving the intestine in that region.

The methods by which we examine a patient may be divided into inspection, palpation, percussion, auscultation and exploratory incision. By inspection we recognize any irregularity in the abdomen, the part in which it is situated, discolorations of the cervix, cicatrices or striae. These are quite marked in this patient, indicating the abdomen has undergone such distention as to cause rupture of its pigmentary layer. These striae are frequent in pregnancy. Rarely does a woman attain to the full term without more or less of such phenomena present. While this is considered as one of the signs of pregnancy, it should be kept in mind that it is not a result of pregnancy alone, but of any condition which causes sufficient distention of the surface to bring about such a change in the skin. It may result from ovarian or fibroid tumors, from a distention from ascites or obesity. The discolorations of the skin should be noted. These are more marked in the brunette, less so in the blonde. Pigmentation in the skin in some cases is very extensive. These discolorations also are not confined to pregnancy. In a woman who has been pregnant we frequently find a dark line known as the linea nigra, running from the umbilicus to the symphysis, in some cases even extending to the xiphoid appendix. We also find more or less discolorations of the skin on either side. These discolorations take place in other distentions of the abdomen, as ovarian disease and uterine growths, and are in particular characteristic of some forms of amenorrhœa. Indeed, it has been asserted that the change in pigmentation is due not so much to the fact that the woman is pregnant, but to the arrest of menstruation; that there is an elimination of material through menstruation.

which would otherwise be deposited in the skin. There are other discolorations which result from inflammatory conditions produced by various counter-irritant applications. These serve to throw light on the previous history of the patient. For the inspection the patient is placed upon a table or bed, the abdomen is bared and a sheet placed over the lower extremities, making it hug closely the lower part of the abdomen.

While we conduct the inspection we may proceed with palpation. This is performed by placing the hands over the abdomen, sometimes in grasping the entire abdomen, at others bringing the hands closely together from side to side over the distended parts, and in this way securing a definite idea of the size, consistency, regularity and mobility of the growth. In so doing we determine whether it is a solid or a fluid growth. By solid we mean one which is more or less made up of solid material. A cystic tumor is one which contains within a sac more or less fluid.

As the hand is placed over the abdomen in this patient, I notice on the left quite a considerable projection. It gives rise to fluctuation, or sensation of elasticity, which indicates fluid contents. At other points in this tumor there is a sensation not so distinctly determined which is more resistant, although a greater part of it would indicate that we had to deal with a cyst rather than with a solid body. Placing the hand over the abdomen and tapping on the opposite side, a distinct wave of fluctuation can be distinguished. This is particularly marked if the fluid is free in the abdominal cavity. It is marked also if the fluid is contained within a single cyst, but if you have one in which there are a number of divisions, the partitions will interfere with the fluctuation wave, rendering it less distinct, and where the cavities are small may make it indistinguishable. The wave here is distinct and extends over the side on which percussion is made. The symptom of fluctuation is one which should be carefully studied in every case, for by it we are enabled to determine whether the fluid is contained in a single sac or is free in the cavity.

By palpation I am led to assert that this growth contains fluid; that it is not a single sac, but composed of a number of sacs; consequently fluctuation does not present a long wave. In such cases there

is a possibility of error. We may have in a fibroid tumor, as a result of interference with the circulation, the tumor become filled with fluid; in other words, it is oedematous. In such cases I have been in doubt whether we had not, instead of a fibroid tumor, a fibro-cystic tumor. I remember some years ago, in doing an operation upon a patient whom I had examined some three weeks before and had satisfied myself that she had a fibroid tumor, the pedicle was somewhat long and the tumor readily moved about. Three weeks after the first examination, when I came to operate upon her, the tumor had greatly increased in size, the growth had apparently been rapid, and there was a distinct sensation of fluctuation and elasticity, greater than we would find in the growth before us. If I had not examined the patient previously I would have been in doubt as to whether it was a cystic tumor or a fibroid. The operation was done, the tumor removed, and a distinguished surgeon and pathologist, taking up the mass, said it was a fibro-cystic tumor. With a knife he cut through it and did not find a single cyst. It was a fibroid whose circulation had been interfered with and the growth had become oedematous. The fibrous tissue was so separated by the fluid that it had given rise to the distinct sensation of fluctuation to such a degree as to lead this experienced gentleman to believe it was a cyst.

In the case before us the irregularity of the growth, with its sensation, renders it impossible that it can be due to an oedematous solid tumor, consequently a tumor containing a number of small cysts. Solid tumors in a woman of this age are rare. Fibroid tumors have their greatest activity prior to the menopause. Subsequent to the climacteric a solid growth which has increased rapidly in size is more than likely malignant. That this is not a malignant growth is rendered probable by the fact that it has been in existence for ten years. It began shortly after the menopause, has increased in size, although the patient within the last year has felt more discomfort and distress than prior to that period.

There is but little to be learned by either auscultation or percussion. Percussion enables us to outline the relation of the intestine to the tumor, and as I pass to the

left we recognize the intestinal resonance. In other words, this tumor, having begun on the right side of the abdomen and increased in size, has pushed the intestine to the left and upward. When I examined this patient a few days ago I was in doubt as to the character of the growth and the organ from which it originated. Of course, in considering the growth itself, as it is more upon the right side we have thought of the possibility of it having originated from the liver, kidney, ovary, or as a growth from the uterus.

That this tumor is not one of the liver we are inclined to believe from the fact that it is situated low down in the pelvis; there is not the distention of the upper part of the abdomen; we are able to pass the finger between the tumor and the ribs and to determine that it does not extend beneath the ribs. Further than that, as we palpate we can notice a line of resonance between the tumor and the liver, so excluding the liver.

We next consider the possibility of its having originated in the kidney. The tumor is situated well upon the right side, more marked on the right than the left; it is very much in the situation we would expect a tumor which had developed from the kidney. A tumor in the kidney attaining considerable size will project beyond the median line. This patient gives a history of frequent micturition, of having evacuated pus and blood with the urine; a history of deficient amount of urine, not more than eighteen ounces in twenty-four hours. All these symptoms would indicate the possibility of this being a diseased condition which may have originated in the kidney. When we consider the growth of the tumor, its situation, that it extends over toward the left side, fills up the space extending transversely across the abdomen, much wider transversely than vertically, that there is a slight sensation of fluctuation and the tumor is irregular, it becomes improbable that it has originated in the kidney; as a diseased condition of the kidney to give rise to a tumor of this size must be either inflammatory or malignant. Inflammatory disease may arise as a result of calculi in the renal pelvis; the presence of calculi may produce distention from the subsequent irritation, infection and suppuration. It is not unusual for such tumors to attain large size. I operated

only a few days ago upon a tumor as prominent as this on the left side of the patient which did not project as far beyond the median line as this does. In that patient we found a quart of pus. It had originated from a calculus in the pelvis. But the history in this patient is not that of an inflammatory condition. We find no indication from the temperature record of any marked deviation from the normal. I am not, then, inclined to believe, from the appearance of this tumor and the length of time it has been in existence, that it is a distention of the kidney as a result of suppuration. In this consideration I believe the decreased amount of urine and the deposit of blood and pus may be due to pressure upon the ureters, possibly also upon the kidney, but particularly upon the bladder. The length of time the patient has been carrying it, ten years, is too great, it seems to me, for the growth to be due to the presence of pus alone.

Eliminating the probability of this growth being one of the kidney, we question the possibility of it being disease of the ascending colon. She gives no history of obstruction, while she is suffering from constipation. The absence of obstruction does not justify such a diagnosis. The tumor has been increasing in size. We are enabled to eliminate the probability of it being malignant disease of the intestine, while it is difficult to determine externally what we may find within the abdomen.

We are confined, then, to the probability of its being a growth of the uterus, of the ovary, or a retroperitoneal tumor. In retroperitoneal tumors we would expect to find, as it increases in size, the colon would be pushed in front of it, possibly over it. In this case the colon is situated to one side and not over the growth, consequently this tumor is within the peritoneum. I operated a little over a year ago upon a patient who had had a tumor for nine years in which there was marked distention of the abdomen and a distinct sensation of fluctuation. Although there was a line of readily recognized resonance running over its side, I had no hesitancy in believing it was an ovarian growth. The abdomen was opened, when it was found the tumor was situated behind the peritoneum. The peritoneum was opened, a trocar plunged into the tumor and the latter subsequently drawn out, leaving the

entire left side of the abdomen denuded. In this space the kidney could be seen distended and sacculated. So distended was it that it resembled a cyst, and after inspection it was decided to remove it. The fact that the line of resonance extended over the side of this tumor in the situation of the colon should have led me to suspect the possibility of it being other than an ovarian tumor. It is not impossible that in some forms of cysts of the ovary the situation may be such as to simulate very closely a retroperitoneal cyst, but such cases are rare.

As I make a vaginal examination of this patient I find the uterus is pushed down and rests beneath the tumor; that it can be easily moved over its surface, so that we are driven to the conclusion that this is a tumor of the right ovary, of a cystic character, containing a number of small cysts; that its contents are probably thick and viscid, and there are without doubt a number of adhesions. Before proceeding to consider operation in this case we will have the urine tested, and if it is eliminated in proper quantity we will proceed to prepare her for operation.

THE VARIOUS OPERATIONS FOR THE RELIEF OF CHRONIC AND SCLEROSED MIDDLE EAR CATARRHAL INFLAMMATIONS, AND WHEN SUCH SHOULD BE PERFORMED.

LAURENCE TURNBULL,* M.D., PH.G., PHILADELPHIA.

A large number of individuals are susceptible to sudden changes of temperature, exposure to draughts or currents of air striking any part of the body, but especially the back of the neck, feet or an uncovered part. They soon feel that they have taken what is termed a "cold," the first symptom of which is sneezing. This is followed by a watery discharge from the nostrils and by swelling of the membrane covering the turbinated bones. If this condition is not promptly treated by a solution of cocaine to the nostrils, with five grains of Dover's powder at night, so as to keep the skin warm and moist, the inflammation progresses and the discharge becomes mucous, yellow or yellowish-green, from a mixture of the blood corpuscles from the surface of the membrane which has become abraded. This condition should be promptly treated by mild antiseptics, alkaline washes, the use of Politzer's air douche and large doses of quinine.

The patient usually recovers rapidly from the acute symptoms, but if neglected there may be as complications not simply a stuffy feeling with itching in the ears, but tinnitus aurium and perforation of the membrana tympani, known in common parlance as a "running ear," or otor-

rhea. This in scientific language is termed otitis media purulenta. If the head or brain become involved and there is no perforation, it is then necessary to perforate the drum membrane to relieve the patient. The dry treatment with boracic acid is then employed, keeping the Eustachian tubes free.

Instead of this acute course there is what is termed the catarrhal adhesive process, causing thickening of the membrana tympani with a great increase in deafness from constant attacks. Then occur alterations with contractions, calcifications, ossifications of the bones of the middle ear and obstructions of the Eustachian tubes, when it is termed sclerosed. In some persons the deafness increases slowly for months or years perhaps, while in others it is very rapid from effusion of blood, serum or lymph involving the stapes, oval window (fenestra ovalis), labyrinth or the vicinity of the auditory nerve. The bones of the ear become ankylosed or fixed by bands of lymph, or they are found to be ulcerated and more or less dried and destroyed, acting as foreign bodies producing distressing noises. These processes with hereditary predisposition, also from anaemia, scrofula, tuberculosis or constitutional syphilis.

The diagnosis from the first class is not

* Aural Surgeon to the Jefferson Medical College Hospital, etc.

difficult by careful consideration of the appearance of the membrana tympani, which is sunken from obstruction of the Eustachian tubes, often contains chalky deposits or shows practical atrophy. The test must be made by the watch and tuning-fork; also by the tests of Rinne and Weber. The use of the exhauster of Siegel and Delstanche is important, as by this method may be determined where are the adhesive portions of the membrane.

The prognosis is almost always unfavorable. Even after long treatment by injection of medicated air into the middle ear, by the use of vapors or solutions, by rarefaction and stimulation, a relapse is apt to occur if the treatment is not long enough continued.

It will be well before finishing this part of our subject to dwell for a few moments on the tests before mentioned, those of Rinne and of Weber. The first was brought forward in 1855. Rinne stated

that in those cases in which the tuning-fork is heard longer through the cranial bones than before the ear a disturbance of the sound-conducting apparatus exists. This is known as "negative Rinne." Where, on the contrary, the tuning-fork is perceived longer before the ear than through the cranial bones ("positive Rinne"), it indicates, according to Rinne, a disease of the auditory nerve apparatus.

In Weber's test it was found that if sound conduction to the labyrinth was hindered by pathological changes in the external meatus or the middle ear, a vibrating tuning-fork placed on the middle line of the skull will be heard most distinctly in that ear where the pathological change occurs. In using the test the handle of the tuning-fork is set on the medial line of the skull, or on the median line of the upper lip against the incisor teeth, or on the median line of the lower jaw.

COMMUNICATIONS.

"SOME SURGICAL SINS"—REMARKS ON A PAPER CRITICISING THE PROFESSION.*

M. PRICE, M.D., PHILADELPHIA.

I wish to call attention to a paper which I think has grossly misrepresented the profession.

On the first pages of the *Journal of the American Medical Association* for June, 1894, is a short paper headed "Some Surgical Sins," the writer of which must speak from personal knowledge of a condition of things that every true lover of surgery who works for the best interests of his patient and the advancement of the profession would indignantly repudiate.

Why, then, this savage attack on the surgeons of the world? Are they any less honest or truthful than the writer of this paper which has been given such a prominent position in the organ of our national medical organization, a periodical which is supposed to represent the

profession of the country and is the guide to many of the medical profession? I think these criticisms should be repelled.

Let us examine some of the statements of this champion of surgical honor and truthfulness. He says: "A very significant fact in the surgical literature of recent months has been the evidence of reaction against an over-hasty adoption of operative methods of treatment." I deny that the surgeons of this country ever recommended surgical treatment until they were convinced that operation was the only proper treatment. There is no evidence anywhere in surgical writings and reports that I can find of any change in the methods of competent surgeons in this or any other country, substituting medical treatment for surgical in any condition which they have selected for operative interference. Those who are influenced

*Read before the Philadelphia County Medical Society, December 26, 1894.

by such statements may be guilty of operations for imaginary surgical conditions, something that no *surgeon* would be ever guilty of.

"The low death-rate of the new surgery made such a contrast with the mortality recorded in accepted text-books that the men who believe the new gospel, naturally the young, were enchanted by the safety with which they could operate for conditions that older and more cautious surgeons hesitated to so treat. Many of us have stood appalled at the temerity and astonished at the pathology of these operative members of the profession."

"The low death-rate of the new surgery." How strange that it should be the young who so quickly appreciate the wonderful improvements in surgical sciences and apply them to the wants of the suffering; and how much greater would be the surprise to know that any, no matter how they may have deteriorated in surgery, could go back and for one moment think of comparing success in abdominal surgery in saving lives in conditions tenfold more dangerous than those laid down in the so-called "accepted text-books" of the profession. Is it possible for any one who lays claim to a surgical education, who has devoted any time or consideration to the technique of abdominal surgery, to conceive of such mortality as laid down by the so-called "accepted text-books?" Would they not in turn stand appalled at the horrible record? From 25 per cent. to 75 per cent. of deaths in the so-called "accepted text books" of abdominal surgery! The time may come when the older surgeons—those who have devoted their entire lives to not the one branch of surgery, but to the whole seven branches of medicine as laid down by our schools, and have attempted to be able and efficient teachers and operators in every specialty now recognized by the surgical world; those who have operated for cataract, for fissure of the bowel, for carotid aneurism, for ingrown toe-nail, for hysterectomy and for every operation in the known catalogue of surgical diseases, and claimed to be proficient in all alike (and no doubt they were)—will recognize the fact that the eye surgeon should have special preparation and opportunity, and should devote himself for many years to this specialty alone, before he is competent to perform operation for the relief of dis-

ease requiring operative interference, and that in the same way is special work, devotion and consecration needed in the other branches. I heartily indorse the idea that a man should have a general knowledge of medicine and surgery; that if he selects a specialty, it should be in the direction that most pleases and interests him. From these facts alone he will do better work, be a more competent operator, take more interest in his patients, and give more attention and care to every detail to acquire perfection in his specialty.

"Look at the dozens of operations by me this year without a death," says the operator. His less enthusiastic neighbor thinks of the proverbial kinds of falsehoods, "lies, damned lies and statistics."

When we remember that the writer of this short description of the surgical enthusiast refers to those of the profession who claim more for their reported work than did the writers of the so-called "accepted text-books" of surgery, this statement is truly appalling. So far as I know the entire profession repudiates the old statistics of the so-called "accepted text-books" of surgery and claims a much lower death-rate than do they, and I do not think that the profession at large doubts that the great majority of operators are honest and truthful in the report of their work. I believe with Dr. Roberts, that no man in our profession should be guilty of reporting his cases save with the most absolute accuracy. I believe the medical profession to be many degrees less addicted to untruthful and dishonest misrepresentations than any other calling which men accept as their life-work. I think with Dr. Roberts, that "liar" should be properly stamped on the man misreporting his work, but one should not brand the whole profession with falsehood because some happen to devote their lives, their energy and their money to one of the seven branches of medicine, in order that they may the better understand and care for the patients intrusted to their care. Mr. Tait has done over one hundred operations without a death—the most desperate along with the most easy; Mr. Keith reports dozens of the most terribly neglected cases of hysterectomy without a death; Joseph Price has done more than a hundred operations as they come in abdominal surgery without a death; and

there are many other operators in this country, with many dozens of operations to their credit, without a death to tarnish the record. Why, then, this charge of falsehood? Can Dr. Roberts give the name of a single surgeon of any reputation that this shameful charge will fit?

"Demanding unusually large fees for professional services is a surgical sin which the increasing number of skilled surgeons is happily correcting. To send a bill for a large amount simply because a patient is wealthy does not appear to be just, and to obtain the money because the patient is in fear of death and dare not employ a less experienced attendant, makes one think of the methods of the footpad, who demands your money or your life."

For skilled services in the arts and sciences, in medicine, surgery and the law, in painting and the ministry, it has been the rule the world over since the world began for the better class of all workers to be paid in proportion to skill. The painter demands, in proportion to his reputation and skill in the art of painting, many thousands more than his less skillful rival. The poor man pays \$5 at the bazaar for the horse which will answer his purpose; the rich man, for one that will meet his requirements, pays \$150,000 and thinks himself fortunate in his possession. For the surgeon to value his services to the rich and poor alike would be an injustice both to the profession and to the patient. Fortunately for the surgeon, the rich do not expect any such moderation. I have always found that the most grateful people I have had the pleasure to attend have been those from whom I have demanded very large fees and those from whom I demanded no fee at all. In abdominal surgery, the proportion of those who pay nothing to those who pay a fee is about as ten to one. No abdominal surgeon that I know of ever refuses to go to the relief of a patient demanding his services, and to go entirely irrespective of whether or not there will be a fee. When this is considered on the one hand, and on the other Dr. Roberts' charge that the surgeon uses methods in common with the footpad, demanding the money or the life of the patient, one cannot but feel that the imputation would be both offensive and disgraceful coming from a citizen who owed a bill to a surgeon, but from

one of our own profession it is adding insult to injury.

"Due regard is not given by us to the influence of the nervous system upon the health. Many patients can be cured by medicine or psychic remedies of symptoms that would induce some surgeons to resort at once to mutilating operations. This statement does not apply alone to pelvic conditions, but to affections of joints, muscles and viscera."

If Dr. Roberts had indicated that want of consideration of nervous symptoms obtained in disease in general instead of in surgical conditions only, we might think the charge worthy of serious notice; but when it is said that the surgeon does not properly consider the nervous element I must beg to differ with him. The surgeon has no excuse for such a mistake, nor for accepting nervous symptoms as reason for any surgical operation. If the operator can find nothing but nervous phenomena—no pathological changes, no tumor nor deformity of parts to warrant interference—he has no cause for operating. The patient should be treated for the condition present and not one manufactured by the attendant to fit his notion of treatment.

The system of medical education in the United States, in laying so much stress on the complications and dangerous conditions to which all patients are exposed, leads the student when he leaves college to suppose that his very first case will be a Waterloo. He has been taught in some of our colleges so many dangerous complications in midwifery and has learned of so many frightful operations that in his estimation scarce one patient in a hundred can escape mutilation for her relief and delivery. This city alone yearly sends out a half thousand young men and women, so many of whom have been constantly listening to this dangerous side of medicine and surgery that we cannot wonder that so many operations are thought of, talked about and considered by the young attendant and that so many mistakes are made by him through over-anxiety and misapplied interpretations of symptoms. Every year lessens the dangers to the patient in this direction and gives us a set of men in the community that we can depend on and believe them when they say that an operation is demanded, that there is no other way to

health and recovery. A man who cannot lay his hand on something, demonstrate its existence and show to those associated with him in the case, if they be reasonable men, reasons beyond question for its removal, he should not operate, for no operation is needed. I have made it a rule never to operate until I could demonstrate beyond question both to myself and others that there was something to operate for, and I have not yet been mistaken. I have never performed an operation without first finding a condition demanding operation. I do not say that the condition always was what I thought it was or that I have always been correct as to the pathology, but that always the condition was one which demanded removal. I believe a majority of the recognized surgeons of the United States can, with just pride, say the same thing of their work, no matter if they do report dozens of operations done this year without a death, the which Dr. Roberts thinks a deviation from the truth.

"I am impelled to believe, though I dislike to do so, that the establishment and personal control of private hospitals by surgeons is a distinct evil. Such institutions seem, to me at least, to tend to warp the judgment and make the surgeon's prospective income somewhat obscure the correct view of the patient's good. Practically it is rather difficult for a doctor to keep a hotel for patients without having his professional ethics a little blunted by a hotel proprietor's proper desire for many and long-staying patients. I regret that our human nature is liable to be thus tainted, because surgery can be better done and sometimes more cheaply done in a hospital than in a patient's home. I am convinced, however, that the truest ethical spirit is not developed by these private hospitals maintained for the pecuniary and professional advantage of one man. While some may do no harm, many tend to develop selfishness, theatrical operations and a mercenary spirit foreign to the highest type of surgeon."

For many years the profession at large objected to the general hospital on the ground that it robbed the profession of many interesting and instructive cases, but as the professional mind became convinced of their good, support was given them. No one ever heard, however, so serious a charge against them as Dr. Rob-

erts brings against the private hospital. You will kindly remember that the doctor is surgeon to a number of general hospitals, which live on the generosity of the State and the benevolent public, which take care of patients for him, relieve him of all but the surgical responsibility and release him from all financial risks. Yet he is anxious about the demoralizing influence of private hospitals. He would not have the profession exposed to anything which might deteriorate the high standard of honor engendered by the influence of a general hospital. Can there possibly be a selfish motive? Is it a fear that the private institution may take some patronage from some charity-fed legislative favorites, called general hospitals, which are to-day bleeding the State of thousands of dollars, and, further, possibly imperil the general surgeon in his work, which is so conducive to honor in our ranks, while the State pays the bills?

I think honors are yet easy on the side of the private hospital. Is it just, is it right to assert because a surgeon elects to take care of his own patients in his own hospital, where, refusing none, he relieves rich and poor alike, that the correct view of the patient's highest good is at all obscured by anxiety as to income, or that the commercial instinct of the hotel proprietor is dominant in the surgeon's breast? If a charge is to be made against the private hospital, it might be preferred by the dispensers of help for the relief of the poor, as it certainly lifts from their shoulders a heavy load which would otherwise rest there.

I am convinced there is positive mischief to the profession in all such attacks. The unceasing hostility and envy displayed by those hostile to everything not to their liking is harmful in many ways; the air is full of damaging accusations which have not a single fact for their support, placing honorable physicians and surgeons in a light both odious and false. Reckless and indiscriminate decrying of members of the profession does not tend to elevate the standard of professional character or to enhance public esteem for medical and surgical honesty. There may be some base as Dr. Roberts paints us, but I have great faith in the high and honorable reputation the profession has always borne, and I believe that its members will continue to rally around the standard of truth

and honesty and charity as they have always had the distinction of doing in the past.

It is a serious reflection to make on the honesty and truthfulness and charity of any member of the medical profession that he could be guilty of speculating in human life; that he could look upon the poor sufferer who is doomed, without his assistance, to endless invalidism or death, as a means of profit and prolong her sufferings and agony that he may be pecuniarily benefited. Can any member of this society believe that such a monster exists among us? If we admit Dr. Roberts' argument we must indeed be ashamed of our profession. Can it be true, when we have the honorable record of those who have laid down their lives in times of war and pestilence?

It may be a question to some minds who is the more honorable, the man who contributes not only his skill, but a great portion of his income, to the care of the poor, or the surgeon who, either by political influence or it may be superior surgical attainments, receives appointments to a half-dozen hospitals (there seems to be no end to the number of the *general* hospitals or to the variety of *specialty*

positions therein) which he is able to hold with the highest degree of professional honor? To none of these general hospitals does the surgeon contribute largely of financial help. They are supported by endowments and contributions from the thousands of charitable citizens; much of this money being collected by men who make a living by soliciting for charities contributions, 5 to 10 per cent. of which they receive for their influence, ability and knowledge of men and for their aptness as beggars. Or a *general* hospital may be the outcome of that other form of honorable preferment which comes of political affiliation, where the State is to furnish the means to forward the interests of some favorite individual who has relatives at court, and for a good berth for him the State must pay out its thousands.

If the *private* hospital tends to warp and disfigure the mind of the surgeon, preventing the development of the truest ethical spirit, what must be the result of the *general* hospital on the surgeon who, without risk or financial responsibility and with the reputation of his hospitals at his back, boasts that he makes thousands yearly?

TWO CASES OF EXTENSIVE DESTRUCTION OF THE INTEGUMENTS WHICH WERE CURED BY TRANSPLANTING LARGE FLAPS.*

WILLIAM B. HOPKINS, M.D., PHILADELPHIA.

John J., aged thirty-two, was admitted to the Episcopal Hospital November 9, 1888, with an extensive laceration of the elbow, involving skin, superficial and deep fasciae. The injury was caused by a centrifugal dryer in a sugar refinery. A month later, December 7th, an ulcer occupying the entire circumference of the elbow, consequent upon the original loss and subsequent sloughing of integument, remained. It extended from the middle of the forearm to the middle of the arm, or about 96 square inches in area. The following operation was then performed: A vertical flap 5 inches wide and 9 inches long, consisting of skin and superficial fascia, the base of which

occupied the upper left pectoral region and the edges of which were nearly parallel, was lifted from the chest and sutured around the elbow, the limb being retained in the Velpeau position. Approximation of the enormous chest wound, though not complete, was materially facilitated by the emaciation following so severe an injury and consequent relaxation of the integument of the chest. At the end of four days the flap was severed from its basic attachment to the chest and the arm was released from its constrained position. There was epidermal sloughing of the flap after its severance, which caused considerable anxiety, but its deeper layers were soon found to have formed a firm attachment. The patient remained in the hospital 279 days. The limb will be seen to

* Read before the Philadelphia Academy of Surgery, December 3, 1894.

have perfectly healed, to be amply covered with a soft pliable integument permitting complete flexion and extension, pronation and supination; indeed, but that it is not quite so strong as the right arm, to have its functions entirely restored.

CASE II.—Anton D., thirty-three years of age, a fireman, was brought to the Episcopal Hospital October 25, 1892, with a railroad injury of his left foot. The extremity was so caught beneath the wheel that it had been completely flayed, but as none of the integument was lost it was brought together by sutures. Sloughing, however, occurred of the entire skin of the foot and ankle. December 4th a flap 2 inches wide was dissected from the sound limb, from the lower portion of the thigh to the lower third of the leg, a distance of 14 inches, its base being left attached at the lower part. Carrying the lower portion along the outer side of the foot from before backward, the flap was reflected upon itself around the heel, and its remaining portion carried forward on the inner side of the foot to the toes. It was retained in this position by sutures carried deeply enough through granulation tissue to take a firm hold, and through the reflected lower borders of the flap occupying the sole of the foot. With a Y-shaped splint ingeniously devised by Dr. Ferguson, which kept the injured foot in a state of absolute fixation to the calf of the leg on the sound side, the patient, with remark-

able fortitude, kept his limbs in this constrained position for over three weeks (22 days), when the base of the flap was detached, the latter having become firmly adherent to the foot. Advantage was taken of this opportunity to gain a little more integument by dissecting the flap further down the leg instead of cutting it off level at the foot. The patient remained in the hospital 657 days, at the end of which period he walked without a cane and with a foot whose function was sufficiently restored to enable him to resume his laborious occupation of fireman on a vessel. The foot will be seen to be a very useful one, its plantar aspect being covered entirely by leg skin, as shown by the growth of hair upon it.

It will be observed in both of these cases that there is a singular freedom from the constriction of a tightly drawn peripheral cicatrix, edema, impairment of function and other evidences of impeded return circulation. This factor alone places this method of closing large circumferential ulcers far in advance of the method by skin-grafting. Though the method of Thiersch and others, of allowing the flaps before severance at one or both extremities to become granulated, would have been applicable to the case operated upon six years ago, it is very doubtful if so long a flap as that transplanted in the other case would retain its vitality throughout its length, even if left attached at both ends.

PHLEGMON OF THE STOMACH.

WILLIAM VISSMAN, M.D., LOUISVILLE, KY.

A pathological specimen which will be of interest on account of the rarity of its like, if for no other reason, is a section of a stomach taken from the corpse of a laborer's wife.

The ante-mortem diagnosis was doubtful. However, carcinoma planum was supposed on account of age, fifty years, absence of hydrochloric acid in gastric juice, slight icterus, complete anorexia, vomiting, pain in epigastric region, no tumor, nourishment very bad. These conditions, with a history of a general in-

disposition for some time before entering the hospital, were the cause of the suspicion of the attending physicians.

The post mortem showed very slight thickening of endocardium, hypostasis in lungs slight, hyperplasia of spleen and cloudiness of liver and kidneys. Stomach was empty, walls about half-inch thick, and this thickness was continuous throughout the organ and extended a slight distance (about one inch) up the cesophagus.

The mucous membrane was thickened, pale and oedematous; the submucosa was

impregnated with a somewhat opaque, yellowish, gelatinous fluid which exuded on slight pressure. There was no other center of suppuration to be found in the body.

The microscopic examination of the stomach showed the greater part of the thickening of its walls to be due to the infiltration of the submucosa with pus. Not only is the submucosa infiltrated, but this infiltration follows the connective tissue throughout the entire walls. In other words, we have a phlegmon of the stomach enveloping the entire organ.

This condition can only be brought about in one of two ways, by metastasis or by direct infection, and when due to metastasis, as is very often the case in puerperal sepsis, is generally circumscribed (abscess of stomach). However, this is not necessarily the case.

Direct infection may take place from external injuries, as in Silcock's case after gastrectomy ("Trans. Lond. Path. Soc.", 1883), or it may take place from the inner surface, particularly after partaking of infected food. This mode will appear just a trifle implausible because the gastric fluid is supposed to be an excellent disinfectant, but the experiments of Falks ("Virchow's Archives," vol. xciii), which were proven a year later (*Deutsche Med. Wochenschrift*, 1884, No. 20) by Frank, show that the gastric fluid does not affect the power of proliferation of the tubercle bacillus. In the event that the patient lives until the phlegmon advances far enough to form abscesses, it is evident that the mucosa will be undermined to a great extent and very apt to become necrosed and cast off, as was reported by Laboulbene (*Bull. de l'Acad. de Med.*, 1876). This case was due to sulphuric acid, and two weeks after the ingestion a membrane 20 by 12 cm. was cast off.

These cases are sometimes diagnosed by finding large quantities of pus in the vomit.

Instead of forming a large abscess the mucous membrane may be perforated in a large number of places, but in either event it is very doubtful if any recovery has taken place.

As for symptoms and treatment, from the morbid anatomy they are obviously those of general sepsis. As to the frequency of these cases, I can add nothing to Rokitansky ("Lehrbuch der Pat. Anat.," 1861), who says they are very rare. I

have seen only this one among more than 10,000 post-mortem examinations; and Delafield and Prudden in 1892 report having seen only one case.

Painful Peritoneal Adhesions.

Nicaise (*Revue de Chirurgie*) states that the use of antiseptic methods and the consequent development of antiseptic surgery have made surgeons better acquainted with peritoneal adhesions and have led to their successful treatment by operation. These adhesions may give trouble by disturbing the function of implicated organs and by exciting pain. The pain varies in character and intensity in different cases. It may be caused by displacement of organs to which the adhesive bands are attached or by constriction of the intestinal canal. The pains in the latter condition are often very severe and of a similar nature to that of hepatic and renal colic.

The diagnosis of peritoneal adhesions is often very difficult. In some cases their existence can only be assumed by the process of exclusion, while in others their certainty can only be demonstrated by an exploratory operation. The author is of the opinion, however, that a diagnosis can be made in many cases by close inquiry concerning such details as previously occurring abdominal inflammation, the seat of pain, and the relation to the seat of any previous inflammation, the time when the pain comes on in regard to the taking of food.

As many peritoneal adhesions become longer and thinner and have a tendency to disappear, there should be no great hurry in having recourse to an operative procedure. When, however, they cause great pain, a laparotomy should be performed and the adhesions broken up. The cure that will thus be effected will be permanent and complete.

Chloroform Treatment of Phthisis.

In the *Jour. de Med. de Paris* Mr. Potter urges that by the inhalation of chloroform the bacillus of tuberculosis is destroyed *in situ*. It is not necessary to produce anesthesia, but short of this inhalations should be employed at brief intervals daily for a considerable period.

CORRESPONDENCE.

THE INJECTION TREATMENT OF HERNIA—REPLIES
TO INQUIRIES.

EDITOR MEDICAL AND SURGICAL REPORTER:

Inquiries for further information regarding the injection treatment for hernia have become so frequent that I am compelled to answer through the columns of

THE REPORTER.

First, as to the truss and its application. For scrotal hernia I prefer what is known as the "German scrotal truss." This is a soft padded truss easily adjusted and easy to the wearer. A perineal strap keeps it well in position. I have held old ruptures with this truss that could not be retained by any other form. Still, for an all-around truss the Hood pattern is probably the most satisfactory. Either of these may be obtained from the dealers. It is important in fitting a truss that it does not press upon the pubic bone. The pad should rest just above it. The spring of the truss should not press upon the body, but be bent so as to be perfectly comfortable, pressure being exerted only on the pad over the hernia and on the disk at the back; this pressure being only sufficient to keep the hernia well in. If such pressure produces excoriation, wash the parts with dilute alcohol, dry thoroughly and dust with stearate of zinc. Repeat as often as necessary.

Taxis.—The text-books give quite full instructions, to which the reader is referred. Taxis should not, however, be practiced for over fifteen minutes at a time with any patient. Let the patient rest for awhile and repeat; but it is better not to make too many attempts at reduction on the same day in obstinate cases. Prolonged taxis in any case is dangerous.

If strangulation has occurred and the bowel seems to be filled with gas, some operators recommend that it be punctured with a small hypodermic needle, detached from the syringe, and the gas allowed to escape. I see no objection to this procedure. Ice may be applied in strangulation, or a little ether poured over the parts. The ether by rapid evaporation produces intense cold which rapidly contracts the parts, frequently allowing of reduction.

The positive pole of a galvanic or a faradic battery has been successfully used with the negative at some other point. Contraction is caused and possible reduction.

Morphine, $\frac{1}{4}$ gr.; atropine, $\frac{1}{16}$ gr., and hyoscyamine amorphous, $\frac{1}{16}$ gr., combined in one hypodermic injection, has been used with prompt effect in strangulated hernia. Dosimetric granules of these alkaloids are a very convenient form for such administration. They are very soluble and a little dozen-vial case containing as many varieties, one hundred of each, is easily carried in the vest pocket.

Coughing Taxis.—Dr. Wherry, in the *Lancet*, says that he has frequently found that coughing on the part of the patient during taxis was a great aid in the reduction of hernia. He cites a case of femoral hernia, severely strangulated, in a middle-aged woman which he succeeded in reducing by gentle taxis continued for fifteen minutes, the patient coughing continuously. Two other physicians, aided by chloroform, had previously failed to reduce the hernia. This method is easy and safe and well worthy of trial before any other attempts are made.

"How shall I know when the patient is cured?" In an ordinary case one week after the sixth injection has been properly made the patient may stand, the truss be removed and the parts carefully examined to see if there be any signs of a protrusion. The patient may give a slight cough, which will give an impulse differing in character upon the two sides if there is still a hernia. With the finger these impulses may be readily differentiated after a little practice. If the hernia seems to be well, allow two weeks to pass, when another examination should be made. Of course the truss must be worn as usual, and finally not laid aside without the consent of the operator.

In one month after the last injection you will be able to determine whether further treatment is necessary. There

may be a weak point that needs reinforcing. Keep the patient under observation for at least six months, with monthly inspections, in order to prevent a relapse through carelessness on his part. He should not be allowed to put undue strain upon the parts until they are thoroughly healed.

The operation for femoral hernia is practically the same as for the inguinal variety: reduce the protrusion, follow up the canal with the trocar and canula needle, and proceed to obliterate it by producing the proper amount of adhesive inflammation.

The object aimed at is to close up the opening by which the bowel leaves the

abdomen, whether this be femoral, inguinal or umbilical.

For these operations only a suitable trocar and canula needle and a proper fluid should be used. Safety and success depend absolutely upon those two requisites. The skill to use them is readily acquired.

The injection method has established a permanent position in the treatment of reducible hernia, and the percentage of cures is greater than by operative procedure if proper instruments and fluid be used. Progressive physicians all over the country are adopting it with good success.

W. H. WALLING, M.D.
Philadelphia.

VALVULAR HEART DISEASE, WITH PARTICULAR REFERENCE TO THE USE OF STRYCHNINE.

In the opinion of Dr. Meffler (*Med. Record*), medicines should be dispensed with in valvular diseases of the heart as long as compensation is complete and hypertrophy does not provoke any marked secondary symptoms. Absolute rest is, of course, of prime importance. There should be regular hours of rising and retiring. The daily exercise should stop short of producing fatigue. The mind should be cheerfully occupied. He advises simple nutrition, without overloading the stomach; hence frequent small meals, rather than heavy dinners; very little fat, sugar and succulent vegetables; let the patient partake of nitrogenous, albuminous food, and abstain from stimulating drinks.

When dyspnoea and vertigo set in after failure of compensatory hypertrophy, strychnine in small and frequent doses, in the author's opinion, best supports the heart's action, while the general tonic treatment should be used in conjunction. Thus iron, arsenic and vegetable bitters, together with heart-tonics, should be given.

The author regards digitalis still as "the" remedy when alarming dyspnoea and incipient dropsy make their appearance; but the digitalis or strophanthus should be withdrawn when beneficial results have been secured. But the nutrition of the heart is most steadily and greatly stimulated by small doses of strychnine.

Small doses of nux vomica are also often administered with success. Caffeine is considered as more of a diuretic than a cardiac tonic. Coronilla is said to be slow in its action and not always certain.

The author sums up his experience in treating cases of valvular heart disease as follows:

Physical rest, associated with light, regular, pleasurable exercise; absence of all worry, mental anxiety and sudden emotion; plain, abundant, nutritious diet, as dry as possible; absolute avoidance of all stimulants; the use of general tonics and hydropathic measures conducive to the building up of the general constitution; for the heart, the continuous use of small doses of nux vomica or its alkaloid, reserving the more powerful heart stimulants, like digitalis, for threatened dropsy. In some cases better results were obtained from the combination of digitalis, strophanthus and convallaria than from either alone. In others it was found that either of these special heart-tonics alone produced the greatest comfort when assisted by minute doses of strychnine. It is bad treatment to use larger doses of any drug than is absolutely necessary; and oftentimes three to five drops of digitalis with $\frac{1}{16}$ or $\frac{1}{8}$ grain (0.6-1 mgm.) of strychnine will act better than the larger doses of either alone. The use of strychnine alone is, in the majority of these cases, the best for prolonged treatment.

THE MEDICAL AND SURGICAL REPORTER

ISSUED EVERY SATURDAY

Address all communications to P. O. Box 843, Philadelphia, Pa.

HAROLD H. KYNELL, A.M., M.D.
Editor.

RODERIC C. PENFIELD
Publisher.

Editorial Offices, 1026 Arch Street, Philadelphia, Pa.

Entered as second-class matter at Asbury Park, N. J.

TERMS:—Three Dollars a year in advance. Sent four months on trial for \$1.00.

REMITTANCES should be made payable to the Publisher only, and should be made by Money Order or Registered Letter.

NOTICE TO CONTRIBUTORS:—We invite contributions of value to the profession, and if published originally in THE REPORTER such will be paid for at liberal rates, or a limited number of copies of THE REPORTER will be supplied, as the author may elect. Hereafter where reprints are desired writers are requested to make a note of that fact on the first page of the MS., but must order reprints directly from the publisher, who will supply the same at cost rates. Contributors should inclose stamps for postage, that the articles may be returned if not found available.

SATURDAY, JANUARY 19, 1895.

EDITORIAL.

THE ORIGIN OF SEX.

There was once a notion that a woman by eating a lily, the symbol of purity, could become pregnant without the help of man. Notions as to the origin of sex having no more scientific or rational foundation have been held—indeed, positively declared as true. Thus Melanchthon, in the sixteenth century, asserted: "Males come from the right side of the womb and originate from semen from the right testicle. Females come from the left side of the womb."

Part of Melanchthon's theory was as old as Aristotle, who asserted that the right testicle produced boys, the left girls, and has told how Leophanos made the production of males or of females at will in his domestic animals by tying the testicle he wished to render sterile.

An old opinion still held by some asserts that the sex depends upon the relative preponderance or predominance of male or female at the time of fecundating

coition. Debay has observed that this opinion, however satisfactory it may seem at the first glance, does nothing but point out the effect and is silent as to the cause. The words preponderance and predominance do not prove in what manner the ovum and the sperm, which have no sex, can give it to an embryo.

According to Mantegazza, the theory just mentioned has been upheld by the Chinese. They say that if the strong principle, *yang*, dominates in the male and the feeble principle, *yu*, in the female, a boy is born, while a girl comes in opposite conditions.

Debay maintained that the determination of male and female depended upon the greater or less nitrogen contained in the material of which the ova and the zoospersms are formed. In order that a male may be begotten the wife must for twenty or twenty-five days be restricted to substantial and nitrogenous food. With-

out mentioning the details as to her diet, we note that the author directs for the husband an opposite regimen—in fact, for the time he becomes a vegetarian. The last (the 166th) edition of Debay's work, "Hygiène et Physiologie du Marriage," was published in 1893, and the first twenty years before. We have quoted the directions more especially because a somewhat similar regimen for the same purpose was recommended two or three years ago by a German physician in the *Centralblatt f. Gynäkologie*. Echoes are more numerous than voices!

Thury's law determining sex in animals has not been proved to hold in human beings. A French physician, Mestivier, has stated that woman furnishes a male ovum one month and a female the next. Now, observing what month the first child is born in, the sex of subsequent births can be predicted, for supposing the child to be born in January and male, January and alternate months are male months for that mother, while girls will be born in February and its corresponding alternate months; properly the male month or female will be nine months before the birth.

Of course it is well known that the proportion of boys to girls is about 106 to 100, and that this preponderance is less in cities than in the country. It has been suggested that the excess of male births is in part to be attributed to the fact that in almost all families a son being desired, once such birth occurs, Malthusian moral restraint is invoked so that there is no more increase in the family. Physiology is utterly silent as to why more males than females are born.

In old primiparæ the excess of male births greatly increases, 140–160 to 100. It has also been observed that in new colonies in which not only young women, but also those that are old, readily marry, male births are also in great excess.

From some writer whose name escapes

us for the moment we have the following statements: "A hundred ewes extremely well fed will produce a larger percentage of ewe lambs, while a hundred ewes poorly fed will produce a larger percentage of rams. After a war or a famine there are more human males born; in times of plenty and in the upper circles, more females."

In Drummond's "Ascent of Man" we find the following: "Starting with the function of nutrition as the nearest ally of reproduction, the newer experimenters have discovered cases in which sex has been apparently determined by the quantity and quality of the food supply. And in actual practice it has been found possible, in the case of certain organisms, to produce either maleness or femaleness by simply varying their nutrition—femaleness being an accompaniment of abundant food, maleness of the reverse. When Yung, to take an authentic experiment, began his observations upon tadpoles, he ascertained that in the ordinary natural condition the number of males and females produced was not far from equal—the percentage being about 57 female to 43 male, thus giving the females a preponderance of 7. But when a brood of tadpoles was sumptuously fed the percentage of females rose to 78, and when a second brood was treated even more liberally the number amounted to 81." A third experiment with still better food gave 92 females and only 8 males.

Undoubtedly these and similar experiments will bring some light to one of the darkest problems in physiology, the origin of sex in the human race, but that they will drive away all the darkness we may doubt.

The Source of Danger.

Doctor—You mustn't stay out late at night.

Patient (a married man)—Is the night air bad for me?

Doctor—No; it's the excitement after getting home that hurts you.

ABSTRACTS.**DIAGNOSIS OF DIPHTHERIA.**

Special announcement from the Laboratory of Bacteriology of the Philadelphia Polyclinic. As the early diagnosis of diphtheria from other pseudo-membranous affections of the throat has always been a matter of difficulty and in some cases of absolute impossibility, the consensus of opinion is that it can be made with certainty only by a bacteriologic demonstration of the presence or absence of the Klebs-Loeffler bacillus. Furthermore, the question of the association of other pathogenic and of pyogenic microbes with the Klebs-Loeffler bacillus is of importance in prognosis. In view also of the introduction of the blood-serum

therapy, an early and absolute diagnosis is imperative in testing the efficacy of such treatment.

The Laboratory of Bacteriology of the Philadelphia Polyclinic is ready to undertake this examination and to report to physicians the bacteriologic diagnosis of suspected cases. Sterilized swabs and blood-serum tubes, together with instructions for the method of procedure, can be obtained at the laboratory or from Mr. W. S. Leffman in the faculty's office. The results of the examination will be reported within twenty-four hours from the time of the return of the tubes. *This service is gratuitous.*

TREATMENT OF GASTRIC ULCER.

Milk has been and still is the most important dietary food for patients suffering from gastric ulcer. Rest, as in most diseases, is another principal factor in the treatment. Dr. M. Einhorn describes the Leube-Ziemssen "rest cure," now so popular in Europe, as follows:

The patient is kept abed for two to three weeks. He is poulticed during the day with flaxseed (warm) over the stomach and the upper part of the abdomen; at night a priessnitz (wet linen cloth) is applied over the same area.

The diet consists of liquids—milk, milk with strained barley, oatmeal or rice water, plain water, weak tea and peptone (one teaspoonful to a cup of water). During the first week the patient takes half a cup (about 100 c.c.) of either every hour. Everything the patient takes must be neither very cold nor very warm, and should be taken slowly (sipping or with a spoon). During the second week the patient is given the same kind of food, with the only difference that he is fed every two hours, and a cupful or a cupful and a half (200 to 300 c.c.) is given at one time. In the beginning of the third week the patient is fed every three hours; he is al-

lowed barley, farina and rice (well cooked) in milk, soft-boiled eggs, crackers softened in milk—in addition to his previous food; on the third day of the third week the patient begins to partake of meat—first raw, well scraped, then broiled. Thereafter the patient is put upon the ordinary daily diet—excluding heavy salads, pastry, raw fruit and the like.

At the beginning of the third week the flaxseed poultices are discontinued and the patient is allowed to be up—first for a short time only (one-half an hour to an hour), then for several hours, and thereafter for the whole day. At the beginning of the fourth week the patient may begin to walk outdoors and slowly resume his wonted occupation.

Whenever the pains become associated with frequent vomiting or haematemesis, the author orders the patient to abstain from any food whatever, given by the mouth, for a period of five days. The patient is then fed by the rectum in the following way: Early each morning the patient receives a large enema of about a quart (or liter) of lukewarm water in which a teaspoonful of common table salt has been dissolved (cleansing enema).

About an hour after the patient has voided the injected water the first nourishing enema is given; the same may consist either of a glassful of milk (about 200 c.c.) in which a raw egg has been well beaten and a pinch of salt added, or of a cupful of water in which a tablespoonful of a good peptone preparation has been dissolved. The temperature of either must be about 100° F. (38° C.). Such a nourishing enema is given three or four times a day. The quantity of the feeding enema is 200 to 250 c.c., and it is slowly injected by means of a fountain syringe and a soft-rubber rectal tube. The patient frequently rinses his mouth with cold water, and is allowed from time to time to keep a small piece of ice in his mouth and to swallow the melted water. The five days being over, the mode of diet is the same as described above for the ordinary form of ulcer. In cases of hemorrhage from the stomach, the treatment is the same as in the severe type of ulcer, with the only exception that ice-cold applications are made over the stomach instead of warm poultices.

The author is of the opinion that there is, after the application of the "rest cure," hardly any need for constant medical treatment. Sometimes, however, he makes use of a small dose of codeine if the pains are very severe, and of Carlsbad salt if there is constipation. Only in cases where the ulcer is associated with a hyper-acid gastric juice, he regularly prescribes an alkaline salt, as, for instance:

Calcin'd magnesia 1 part
Sodium carbonate }
Sodium bicarbonate } 3 parts
Peppermint oil sugar }

A tip of a knifeful every two hours.

The author then reverts to the two methods he employs for those patients who cannot undergo the "rest cure." One is the silver nitrate treatment, the other the bismuth treatment. In applying either of these two measures, the patient is allowed to attend to his business and partake of a light diet in which milk plays a great part.

1. The silver nitrate is given first.

Silver nitrate 0 | 3 gm. grs. ivss
Distilled water 180 | 0 " f3 vj

Dispense in a black bottle.
A tablespoonful in a wineglassful of water three times a day half-hour before meals.

After having used up this quantity the dose may be gradually increased—prescribing 0.4 to 0.6 gm. (6-9 grs.) of silver

nitrate to 180 gm. (6 fl. oz.) of water. The silver nitrate may be used in the way mentioned for about two or three weeks and then discontinued. The pains, it is stated, usually disappear after the first week's medication.

2. In the bismuth treatment 3 to 5 gm. (45 to 75 grs.) of the subnitrate are given to the patient three times a day, suspended in water, half an hour before meals. It is best to have the patient lie quietly for about half an hour after having partaken of the powder. The bismuth treatment must be continued for about two or three weeks without interruption.

It is remarkable that these large doses of bismuth do not, as a rule, cause constipation. In all of the author's five cases the bowels moved every day without the aid of any cathartic during the whole time of the bismuth medication; and in four the latter proved very beneficial.—*Med.-Surg. Bull.*

Formalin for Chancroids and Venereal Warts.

Gaylord having tried formalin as a local application is a series of cases of this kind, reports (*Med. News*) his results as uniformly favorable. The best results are obtained by using full-strength solutions, and then one application is usually sufficient. The pain produced by the full strength (40 per cent.) is not markedly greater than that produced by any solution above 10 per cent. Pain, while excessive, can be deadened by cocaine, when it is probably not more severe than that caused by nitric acid. The drug should not be applied over large surfaces except in weak solution. When continued for a protracted period of time it tends to cause an intolerance on account of the pain produced.

Pruritus Ani Successfully Treated with Chlorinated Lime.

N. K. Berger (*Zemsky Vratch*) inserts into the anus, about one inch deep, a pledget of cotton soaked in liquor calcis chlorinate, which is left there until smarting occurs, when it is withdrawn and the anus bathed with the same solution. The operation is to be repeated. Swelling of the parts, concomitant dermatitis or eczema are said to be cured by a few applications.

THE NEW FIGHT AGAINST CHILDREN'S DISEASES.

Whereas in European cities the battle of the municipal and health authorities, so far as epidemics were concerned, was until a few years ago waged chiefly against small-pox, typhus and occasional outbreaks of cholera, it is now considered that the victory has in the main been won against these bolder and grosser enemies of the race, and the conflict has set in against the diseases which are hostile to child life. Scarlet fever and diphtheria are the chief of these children's maladies, with measles as a less dreaded but extremely mischievous third. Thus far the weapons have been mainly those of vigilant, never-ceasing inspection, immediate isolation, disinfection through the aid of highly organized official disinfecting staffs, and in general the sharp blocking up of those avenues through which infection is most likely to be communicated. The difficulty of perfect isolation in tenement-houses has led to the great extension of public hospitals for the reception of children ill with diphtheria, scarlet fever and measles. The great objects of the administrators of the public-health system are (1) to abolish the plague-spots which

are the sources of infection and (2) when infection has appeared to prevent its spread. This of course is the sound policy to be pursued. But, (3) and concurrently, every possible effort is made to save the lives of the poor children actually seized with infectious maladies. If we are rightly informed with regard to the anti-toxine cure for diphtheria, its application is to be beneficial both as a preventive against attack and also, where not previously applied, as a remedy to be administered in the early stages of the disease. Its immediate interest naturally lies in its use as a remedy. A considerable amount of experience, tested in the light of comparative statistics, would be necessary in order to show the preventive value of such treatment, and even then it would be difficult to distribute the honors between a remedial specific of this kind and a generally efficient sanitary administration. As in the case of vaccination, no one could ever tell us conclusively what part the particular treatment has played, and what part improved conditions of public and private cleanliness have had in the gratifying diminution of the malady.

LONG-LIVED AMERICANS.

This Western hemisphere has many sorts of climates, but they all have in common this encouragement, in exceptional cases it is true, to great age. It has been supposed that the exceedingly variable and violent climate of some regions of our country is hostile to long life. But if we study the matter in view of multitudes of instances, we see that it is not climate, or even hardship, that shortens life in the United States, for instance, but that it is worry and care, or, in other words, the furious pace at which we try to live. No attempt is made to defend the climate of New England, and yet the number of people who have attained a great age in it is positive proof that the climate is not altogether in fault for mortality. It is probable that the record would be very different if we had paid as much unworried attention to growing old as we have to

fighting Indians, subduing forests, making money and getting ahead of our neighbors. We are still as a nation very young, some physical conditions have been against us, and there has not yet been time enough to spare to show what the country can do for us in the way of longevity. In New England they are less than three lives from the landing of the Pilgrims. Among the Pilgrim records at Plymouth is a letter from Peregrine White, who was born on the *Mayflower* when it lay in Provincetown—the first white child born in New England. Following that is a letter from an estimable Pilgrim deacon, who lived to be 106 years old, and who testifies that he knew Peregrine White. Following that is a letter from a lady still living, at the age of 92, who says that she remembers the aged deacon of 106 years. Thus less than three lives takes us back

to the Landing and to the Rock, which is almost as mysterious as the aerolite, or black stone, in the Kaaba at Mecca, since it is like no other piece of granite on the Massachusetts coast. It may be mortifying to see that we have no greater antiquity than this, but the efforts of three persons to cover it is encouraging.

But it is in other regions of the continent that we must at present look for the extraordinary capacity of the New World for producing old people. Well-authenticated are cases of mission Indians in southern California who reached the ages of 120, 130 and 140. In that equable region all the great functions of nature go on with regularity, so as to induce a long running of the machine. But besides this, these old men were probably free from care, from religious doubts and skepticism and political worry and ambition, and it is testified that they were simple in their habits, temperate, and even abstemious, drinking only water and eating little but corn, which they fitted for digestion by the vigorous action of their own grinders. Lieutenant Gibbons found in a village in Peru 100 persons over the age of 100, and either he or another credible explorer there reports another man aged 140. He was a very temperate man, ate his food cold and never ate meat except in the middle of the day. In the highlands of South America the habit of old age is a long-established one. In Ecuador centenarians are common. The census of 1864 found in the town of Pilaguin, 11,000 feet above sea-level, about 2,000 inhabitants, among whom were 100 over 70 years of age, 20 about 80, 11 over 90, 5 over 100 and 1 who was 115. Not many years ago there died in Ambato a woman named N. Cucalou, who was 114, and one Don José Soto aged 120. In the year 1840, in the town of Baños, died old Morales, a vigorous carpenter to the end of his life, who was well on in years and the steward of the Jesuits when they were expelled from their property in 1767. In 1838 a witness in a judicial trial was proved to be 140 years old, having been born on the night of the great earthquake which destroyed the old town of Ambato in 1698. How much longer this man lived, who was cradled by an earthquake, is not yet reported. Mexico, notwithstanding its revolutions, is equally favorable to longevity. In the State of Vera Cruz there

died a man in 1893 who was 137 years old. That he was carried off prematurely we have reason to suppose, for at Teluca, where the register is officially and carefully kept, there died only a few years ago a man aged 192.—*Harper's Magazine*.

Public Health Service.

Whatever then may be the merits of anti-toxine as a cure for diphtheria, there can be no mistake in the policy of public cleanliness and of constantly improved health administration. Our American cities come short of their European contemporaries in most points of municipal organization and service. Fortunately, in the matter of public health work we have less to be ashamed of than in almost any other particular. There have been some scandals in the Health Department of New York City, but there has been very much to commend. All that is needed to bring our American municipal health administration up to a point of scientific and practical efficiency equal to that of the very best managed foreign cities, is a reform of our municipal government in general respects. The work of health boards is necessarily hampered at many points by the existence of corruption, of spoils methods and of ignorance and inefficiency in other departments of city government.—*Review of Reviews*.

The Treatment of Hemorrhoids.

Dr. Claude A. Dundore has an interesting article on the treatment of hemorrhoids in *Mathew's Quarterly* in which he presents the following conclusions, based upon a large correspondence with American surgeons:

1. The ligature is the safest method, as there is less likelihood of its use being followed by hemorrhage, strictures, or ulcers.
2. The clamp and cautery causes less pain and a shorter convalescence, but hemorrhage and stricture of the rectum may very often follow its improper application.
3. Whitehead's method should be limited to those cases in which the entire circumference of the anus is involved. In ordinary cases of one or more hemorrhoids it should never be used.
4. Simple dilatation of the sphincter, injection of carbolic acid and Manley's method are merely palliatives.

SOCIETY REPORTS.

PHILADELPHIA ACADEMY OF SURGERY.

Meeting of December 3, 1894.

Dr. H. R. Wharton exhibited

**A DUMB-BELL-SHAPED CALCULUS WHICH
HAD BEEN PARTIALLY ENCYSTED
REMOVED BY LITHOTOMY.**

This calculus was removed from a child five or six years of age. I show it, as it is of interest in connection with the choice of operation for the removal of calculi from the bladders of children. This patient was brought to the Children's Hospital and on examination I found a stone in the bladder. I hesitated some time as to what operation I should make use of. I was inclined to do litholapaxy, but when the child was etherized I made a rectal examination and felt a prolongation of the bladder into the rectum containing the stone. I decided then upon lateral lithotomy, and after exposing the stone and attempting to grasp it, I found that it was impossible to remove it, as the posterior portion was thoroughly surrounded by the walls of the bladder. I dissected it out with my finger without breaking it. The patient after the operation did perfectly well. I believe that in a case of this kind it would be impossible to do litholapaxy, for while the projecting portion of stone could have been grasped and crushed, the encysted portion could not have been reached.

I have had very little experience with these partially encysted stones, but in two of the cases that I have recently seen I have found that a great deal can be learned by rectal examination. In the previous case I was able to make up my mind pretty clearly as to the shape and possible attachments of the stone. I show the specimen mainly for the purpose of calling attention to the difficulty of crushing stone under such circumstances. I have done litholapaxy in a child five years of age. The operation is a satisfactory one if you can completely

crush the stone. In the case mentioned I used a No. 16 lithotrite and had no trouble in crushing and removing the stone. The day after operation the urine was clear and the temperature was normal. The patient made a satisfactory recovery. Some time ago I assisted a friend in a suprapubic lithotomy where much the same conditions were present as in the case which I have reported, the posterior portion of the stone being imbedded. In such a case the attempt to do litholapaxy would have resulted in an incomplete operation.

DISCUSSION.

DR. J. EWING MEARS: Dr. Wharton has presented a very interesting question. I think the experience of lithotomists points to the view that in children and in elderly persons the cutting is a safer one than the crushing operation, for the reason that in children the urethra and bladder being small, there is some difficulty in the manipulation, and in elderly persons there is danger in many cases of disease of the bladder or kidneys.

It will be remembered that when Napoleon III was operated upon for stone by crushing and death supervened, the question was largely discussed, and it was thought if lithotomy had been performed in his case the result might have been different.

DR. THOMAS S. K. MORTON: As bearing upon the question of the choice of operations, it may be of interest to recall an article which recently appeared upon the subject of litholapaxy in children by Surgeon-Major Keegan. Major Keegan believes that litholapaxy is the ideal operation in children, where one can drill himself properly in the procedure, but that for those who have occasion to operate but seldom, the cutting method is far safer. His statistics, running up into

hundreds of cases, show an astonishingly low mortality. Before adopting the crushing operation in children he had cut in innumerable cases. I think that this is the view that should guide us in this country, where few have an opportunity for extensive experience, as the affection is in most localities quite rare. Probably the cutting operation, either the left lateral or the suprapubic, will continue to be the safest operation for all save those who see many cases.

Dr. Wm. B. Hopkins reported

**TWO CASES OF EXTENSIVE DESTRUCTION
OF THE INTEGUMENTS WHICH WERE
CURED BY TRANSPLANTING
LARGE FLAPS.**

(See page 91.)

DISCUSSION.

DR. J. EWING MEARS: I would like to ask Dr. Hopkins why, in the first case, he selected the Velpeau position rather than that at right angles? This would have given better opportunity for keeping the parts clean. An interesting point is in regard to the transplantation of large flaps to cover denuded surfaces about articulations. Both the elbow and the ankle in these cases show perfect preservation of function.

Some years ago I had under treatment a case in which a large denuded surface occupied the surface of the abdomen. It was the largest raw surface that I had seen up to that time. It followed a sloughing bubo from a non-infecting sore. When I was called to the case the ulcer reached from the crest of the ileum of one side to that of the other, and from the umbilicus to the pubes in the median line, and on the right side, where it had originated, it extended three or four inches down the anterior surface of the thigh. It required ten months for this surface to entirely close. The ulcer was finally covered with a cicatrix which was not very tense. Occupying the region it did, it was not so necessary that it should possess the properties which we see in the cases which Dr. Hopkins has presented, where the ulceration occurred in connection with articulations.

DR. HOPKINS: In reply to Dr. Mears I would say that it was desired to take the flap from the chest rather than from the abdomen, and in order to secure the req-

uisite length of flap it was necessary to bring the arm approximately into a Velpeau position.

Penis Vegetations.

DR. B. E. VAUGHAN (*Amer. Medico-Surg. Bull.*) points out that vegetations on the penis are spoken of as venereal warts, but there is no necessary relation between them and venereal disease. They are usually multiple and may be pedunculated or flat. They are caused by the presence of irritating fluids or by simple lack of cleanliness; consequently they are usually associated with gonorrhœa or balanitis. Their usual seat is behind the corona glandis, on the inner surface of the prepuce and at the meatus. They may be few in number and small or large and numerous. Besides the uncleanliness and annoyance, their greatest danger consists in their possible change to malignant growth in the aged. Circumcision, with the removal of the wart-producing surface, is advised. If that is not practicable, use of the galvanic cautery after the warts have been removed with scissors, or the use of nitric acid followed by drying powders, *e.g.*, equal parts of boric acid, bismuth and calomel. If the warts are flat we may apply corrosive sublimate 1 dram to collodion 1 ounce.

Copper Arsenite in Therapy.

A number of cases are described by Dr. A. Hedlicka in which he employed copper arsenite locally, with almost universal success in the various acute and sub-acute inflammations of the mucous membranes, attended with pain, suffusion and more or less watery discharge. He found it most efficient in solutions of 1:50,000–100,000. These solutions are easily made by dissolving a $\frac{1}{10}$ grain pellet in $1\frac{1}{2}$ ounces of water; they are applied at intervals rarely longer than an hour (bladder, urethra and nose), and frequently not longer than from ten to fifteen minutes.

The remedy is rather indifferent in cases where the discharge is thick or persistent unless the affected surface be previously thoroughly cleansed.

The duration of the treatment ranged from a few hours to two or three days in mild cases, from several days to three months in severe cases. The author pretends to have never failed; relief being nearly always instantaneous, no other remedies were needed.—*N. Y. Med. Jour.*

THE LIBRARY TABLE.

BOOK REVIEWS.

ORGANIC MATERIA MEDICA AND PHARMACOGNOSY.
By Dr. Lucius E. Sayre, Dean of the School of Pharmacy, University of Kansas. Philadelphia: P. Blakiston, Son & Co., publishers. 1895.

The work begins with a condensed but quite thorough discussion of structural botany, including vegetable histology. There follows a list of drugs—officinal being distinguished from non-officinal by capitalization—classified according to the part of the plant, root, stem, leaf, etc., from which they are derived. When such a classification cannot be made the drug is distinguished as being an extractive, saccharine substance, mucilage, resin, etc. Then follows a description of drugs according to their arrangement in natural botanical orders, ending with a few animal drugs. Appendix A treats of insects injurious to drugs and Appendix B of organic chemicals prepared artificially. The work is copiously illustrated with 543 cuts, mostly original, and a system of numbering provides for ready reference from one part to another. As the book is designed more for the pharmacist than for the physician, only the briefest allusion is made to the action of remedies. The work is admirably adapted to be used as a combined text-book of *materia medica*, pharmacognosy, botany and microscopy in pharmacy colleges.

A. L. B.

TRAVAUX D'ELECTROTHERAPIE GYNECOLOGIQUE.
Archives Semestrielles d'Electrotherapie Gynéologique fondues et publiées. Par le Dr. G. Apostoli, vice-président de la Société Française d'Electrotherapie, etc. Vol. i, fascicules i et ii. Paris, 1894.

Dr. Apostoli, who may justly be termed the father of electrical gynecology, has in the present work undertaken a task of almost Herculean proportions. Employing his own words, he has attempted to unite into one compendium, of which the present book is but the first volume of two fasciculi, all of the most important contributions that have from time to time appeared upon this subject. He has commenced the work by presenting some of the most important foreign contributions, all of which have been translated into French especially for this purpose. The succeeding volume likewise is to contain papers prepared by other than French writers, and the closing fasciculi are to be devoted to the contributions of eminent French electricians. A valuable feature of the work is to take the form of an appendix containing a complete bibliography of the subject. Dr. Apostoli has been induced to attempt the publication of a work of this magnitude in the hope that the cause of conservatism in abdominal surgery may be materially furthered, and that the number of useless and dangerous mutilations of the female genitalia may be considerably dimin-

ished. The material of the present volume is drawn from the pens of English, American, Russian, German, Canadian, Austrian and Italian authors, and includes the work of such eminent men as Lawson Tait, Thomas and Skene Keith, W. S. Playfair, Ephraim Cutter, Graily Hewitt, A. Lapthorn Smith, Franklin H. Martin, G. Betton Massay, A. J. C. Skene, Paul Munde, Massin, Candia, Klein, Mandl and Laforest. It will be interesting to follow the successive volume of this work.

W. D.

PRACTICAL URANALYSIS AND URINARY DIAGNOSIS. By Charles W. Purdy, M.D., Queen's University. Philadelphia: The F. A. Davis Company, publishers. 1894.

Dr. Purdy calls his book a manual. In reality it should be called a text book, for though in description it is terse and concise, on close inspection it will be found full and complete. The great value of the book lies in the fact that the clinical significance of all substances found in the urine is brought in great prominence—a thing which has been neglected, or rather overlooked, in all the text-books on this subject that have been brought before the medical profession.

The writer has devised a new method for testing for albumin. It consists in the addition to the urine of salt solution until the specific gravity of the urine is raised ten or fifteen degrees. Next add to this solution in a test-tube two-thirds full one or two drops of strong acetic acid and boil the urine in the upper part of the tube. If albumin is present the upper part of the tube will be turbid, in contrast with the clear portion below. This test he regards as being the most accurate of all albumin tests. Second to it is the ferrocyanide test.

The author describes his own electric centrifuge for the precipitation of urinary sediments, the advantages of which are as follows: 1. It permits immediate examination. 2. Sedimentation is more complete and concentrated. 3. It affords a positive method for distinguishing between normal and abnormal crystalline sediments. 4. Micro-organisms like tubercle bacilli are found with greater ease and certainty.

There has been added a chapter, unique in that it has never before appeared in any work on the subject of the urine, and that is the examination of the urine for life insurance. The reason for this is very palpable. In spite of the fact that many companies issue minute instructions in regard to examination of the urine, a very large percentage of unprofitable risks arise through diseases of the kidneys which have escaped detection. He says that minute quantities of albumin are often observed in the urine of men at and beyond middle age who not only appear perfectly healthy, but who have, as a matter of fact, enjoyed the most typical robust health all their lives. The reason for this is that

chron
sequ
first
cont
waste
of gr

LAND
son
Det

Th
gyna
mar
labor
U
peri
spec
tione
pen
Go
the
len
prac
case
ful

T
ticia
tum

I.
II.
II.
IV.
H

"in
mov
ine
ute
are
my
the
me
rha
blo
by
wh

A
J

ma
use
to i
bu
and
old
mi
mo
dis
na
an
of
the
am
the
us

chronic Bright's disease is nearly always the sequel to a robust life, the kidneys being the first organs to fail under the pressure of long-continued activity in the elimination of waste products which are excessive in those of great appetite and ample nourishment.

J. O.

LANDMARKS IN GYNAECOLOGY. By Byron Robinson, B.S., M.D. The Physician's Leisure Library. Detroit, Mich.: George S. Davis. 1894.

This book is not a pretentious work on gynaecology; it simply deals with its "landmarks," such as anatomy, menstruation, labor, abortion, gonorrhœa and tumors.

Under anatomy the author describes the peritoneum and its inflammations, laying special stress on the points where inflammations begin, such as the Fallopian tube, appendix, etc.

Gonorrhœa and its widespread effects on the female genitalia are dealt with at full length on account of its importance, for every practitioner of medicine can call to mind cases in his own practice illustrating the fearful ravages of this disease.

The author has a very simple, and for practical purposes a very easy, classification of tumors, as follows:

- I. Cysts.
- II. Epithelial tumors.
- III. Connective-tissue tumors.
- IV. Dermoids.

He describes a new operation consisting in ligating the tubes and ovaries (with removal if indicated) and ligation of the uterine artery as it courses along the sides of the uterus. The indications for the operation are (1) to avoid the removal of uterine myomata; (2) to aid in causing atrophy of the myomata; (3) to induce cessation of menstruation; (4) to check uterine hemorrhage. This operation will cut off the chief blood supply of the fundus of the uterus, and by it the shock attendant on hysterectomy, which is so often fatal in very anaemic patients, will be avoided." O.

A HAND-BOOK OF MEDICAL MICROSCOPY. By James E. Reeves, M.D. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street, 1894.

We have in this brief work a careful summary of the advantages of the microscope for use by the physician, who is informed, first, as to its importance in medicine, next what to buy when providing himself with an outfit, and how to go to work. The subject of bacteriology is well treated in a small space. The micrococci Pasteuri is preferred to the pneumococcus as being the true factor of the disease in croupous pneumonia. The examination of neoplasms is discussed at length, and the discussion contains just the amount of information required, without confusing the reader with unnecessary details. In examining the blood the author gives the stains that have but recently been brought into use. He brings the book well up to date so far as medical progress is concerned.

J. O.

THE MEDICAL NEWS VISITING LIST for 1895. Weekly (dated, for 30 patients); Monthly (undated, for 120 patients per month); Perpetual (undated, for 30 patients weekly per year); and Perpetual (undated, for 60 patients weekly per year). The first three styles contain 32 pages of data and 160 pages of blanks. The 60-patient Perpetual consists of 256 pages of blanks. Each style in one wallet-shaped book, with pocket, pencil and rubber. Seal grain leather, \$1.25. Philadelphia: Lea Brothers & Co. 1894.

The Medical News Visiting List for 1895 has been thoroughly revised and brought up to date in every respect. The text portion (32 pages) contains useful data, including an alphabetical table of diseases, with the most approved remedies and a table of doses. It also contains sections on examination of urine, artificial respiration, incompatibles, poisons and antidotes, diagnostic table of eruptive fevers and the ligation of arteries. The classified blanks (160 pages) are arranged to hold records of all kinds of professional work, with memoranda and accounts. The selection of material in the text portion and the arrangement of the record blanks are the results of years of experience and special study. Equal care has been bestowed upon the mechanical execution of the book, and in quality of paper and strength and beauty of binding nothing seems to be wanting. When desired, thumb-letter index is furnished, which will save many-fold its small cost (25 cents) in the economy of time effected during a year. The list adapts itself to any system of keeping professional accounts.

INTERNATIONAL CLINICS: A QUARTERLY OF CLINICAL LECTURES ON MEDICINE, NEUROLOGY, PEDIATRICS, SURGERY, GENITO-URINARY SURGERY, GYNAECOLOGY, OBSTETRICS, OPHTHALMOLOGY, LARYNGOLOGY, OTOTOLOGY AND DERMATOLOGY. Volume i, fourth series. Philadelphia: J. B. Lippincott Company. 1894.

This volume represents the collaboration of forty-two contributors, among whom are such men as Byford, Chapin, Cohen, Hunter McGuire, Mills, Rosewell Park, Hare, Sayre, Skene and Von Noorden, of Berlin.

The volume opens with an interesting memoir of Professor Charcot, written by M. Allen Starr and accompanied by an excellent lithograph of the distinguished physician and clinician.

Among the more interesting and strongly written articles are "The Treatment of Rheumatism," by A. Ernest Sansom, M.D., F.R.C.P.; "Pernicious Anæmia," by W. Hale White, M.D., F.R.C.P.; "Pott's Disease," by Lewis H. Sayre; "Affections of the Lachrymal Gland," by Simeon Snell, M.D., F.R.C.S. Edin.

Dr. Sansom defines rheumatism as "a morbid process whose manifestations are chiefly in the serous membranes of the joints, in the pericardium, endocardium, pleura and sometimes in the fibrous tissues in various situations (rheumatic nodules)." . . . "it is very rarely manifested for the first time after the age of thirty-five." He calls attention to the widespread fallacy that all painful affections of the joints are rheumatic, and mentions as

instances the non-rheumatic arthritis of blood deterioration and blood extravasation, as in scurvy, purpura, haemophilia and the infective diseases, as syphilis, typhoid fever, gonorrhœa, influenza and scarlatina. He believes that the disease is due to a disturbance of metabolism whereby certain undetermined toxines are elaborated. His treatment of rheumatism of the joints is summed up in the use of the salicylate of soda, and in cases involving the heart the application over the precordial region of the ice-bag. In protracted cases of rheumatism of the heart and its membranes he recommends the continuous galvanic current from the nape of the neck over the course of the great nerves in front of the neck for six minutes thrice daily, believing it to act upon the trophic mechanism of the heart.

"Pernicious Anæmia," by W. Hale White, is instructive, and he describes three cases in detail of this rare affection, one of which went to post mortem. He calls attention to the fact that the profound anæmia of obscure malignant disease, as of phthisis, is not infrequently confounded with pernicious anæmia.

The detailed report of these cases seems to disprove the belief that in this disease the percentage of red corpuscles always falls below the percentage of haemoglobin. The only constant pathology at post mortem is an increase of iron in the liver, and if we cannot find this increase our diagnosis must have been incorrect. In one of his cases the iron amounted to over 1 per cent., or about twelve times the normal quantity.

Prognosis is always grave, even though temporary improvement is not uncommon. In two cases, however, the patients were apparently free from the disease at eleven years and four years respectively after treatment had been instituted.

Dr. Sayre, in his article on Pott's disease, emphasizes the mistake which many physicians make in treating this affection by the plaster-of-paris jacket in children under three years of age, as their narrow pelvis give no support. The proper apparatus is the padded cuirass and jury-mast. He calls attention to the very practical point that in this disease the pain at first is often not in the back, but in the stomach, so that the case has been treated as one of indigestion.

Dr. Simeon Snell's chapter on "Affections of the Lachrymal Gland" describes several very interesting cases of such rare affections as acute suppurative inflammation of the gland and of adenoma, with photographs.

Altogether the book is one of the best of the series and contains much of interest to the physician, surgeon and specialist.

W. H. P.

ESSENTIALS OF ANATOMY. Including the anatomy of the viscera. Arranged in the form of questions and answers, prepared especially for students of medicine. By Chas. B. Nancrede, M.D. Fifth edition, with an appendix on the osteology of the human body; the whole based on the last edition of Gray's Anatomy. One hundred and eighty fine illustrations. Philadelphia: W. B. Saunders. 1894. Price \$1.00.

The increasing demand for a concise arrangement of such a vast subject as that of anatomy has resulted in the publication of a fifth edition of this admirably arranged compend by Dr. Nancrede, and the addition of an appendix containing a full set of osteological plates has increased the usefulness of the work to an extent which we are sure will fully repay the publisher for his extra outlay of time and expense. W. H. P.

Anxiety as a Cause of Granular Kidney.

It is interesting, in relation to the ailment of the late czar, to recall a paper read by Prof. Clifford Allbutt at the annual meeting of the British Medical Association at Sheffield in 1876. The subject he took up was "Mental Anxiety as a Cause of Granular Kidney," and by an analysis of his case-books he showed what an abnormally large proportion of the patients showing symptoms of granular kidney had been subject to the depressing influence of prolonged anxiety. He says: "During the last two years I find I have made notes of 35 cases of granular kidney occurring in private practice, and I find a marked history of mental distress or care, or both, in 24 of them." This is a large proportion even if we admit that the pushing inhabitants of West Yorkshire worry abnormally concerning this world's goods. Several illustrative cases are given, and one especially in which, as a consequence of an unfortunate investment, a man in a good position for three years "went to bed night by night ignorant whether he might not be gradually drained of his all." Dickinson is in some sense in accord with Allbutt on this question, although not so positive. Prolonged mental disturbance, anxiety or grief as a cause of granular kidney is, he says, "perhaps problematical; the mode of its operation is not obvious, but must be surmised as through the nervous system. A lowering of nervous force is to be recognized at least as predisposing to every form of albuminuria. I have seen so many instances in which granular degeneration has been immediately sequent upon trouble that, in the absence of other causes, I am fain to conclude that mental conditions are sometimes concerned in its production."—*Brit. Med. Jour.*

Digital Compression of the Pneumogastric in Paroxysmal Tachycardia.

Dubois (*Sem. Med.*) has successfully employed digital pressure over the carotid region in a case of paroxysmal tachycardia. The patient was a woman, fifty years old, of nervous temperament, who suffered from frequent attacks of tachycardia, which lasted from five to fifteen hours and often terminated in collapse. In one of these attacks the author displaced the carotid a little toward the median line and made firm pressure over the pneumogastric area, with the result of reducing the cardiac pulsations from 140 to 96 per minute. The seizure was effectively controlled in ten seconds. Moderate compression is insufficient; too forcible pressure over the carotid region may produce syncope.

CURRENT LITERATURE REVIEWED.

IN CHARGE OF ELLISON J. MORRIS, M.D., AND SAMUEL M. WILSON, M.D.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

Dr. George F. Jelly reports a case of

Mental Shock.

The victim was a married man, thirty years old, abstainer from liquor and tobacco, never subject to venereal disease and free from marked heredity to disease. He was usually in good health, but was nervous and excitable.

While walking one day on the railroad track his foot caught in an electric wire, and after falling he was barely able to throw himself outside the track in time to escape an approaching express train which passed a few inches from him. He rose and went home uninjured but somewhat excited, became rather more nervous in detailing the occurrence, slept poorly, woke early in the morning, seeming startled, and found himself unable to speak.

When seen the patient had marked tremor of the lips, tongue and hands, and on attempting to stand a tremor of the legs developed and made him unable to support himself.

Careful examination showed nothing abnormal, the pupillary and other reactions were normal, and ophthalmoscopic examination was omitted.

Any noise, particularly that of a railroad train, caused increase of disturbance and made the patient tremble as if afraid. The mind seemed to act sluggishly, but conversation was evidently understood.

By degrees improvement took place in all the symptoms and became more rapid as it progressed, until it was discovered about a year and a half after the accident that no occurrence that had taken place in the interval had made enough impression on the patient's mind to be remembered.

Improvement in memory began, so that the man could by degrees remember the occurrences of the previous day, then two days, etc., until finally he is able to remember some things that took place six months ago.

Suit was brought against the railroad on the ground that the wire was not properly placed, but was disallowed on the ground that the plaintiff had not exercised due care when on the track. No question of the genuineness of his condition was raised. He is still unfit for any work placing responsibility on him.

Osler divides these cases into simple neurasthenia, cases with marked hysterical manifestations and cases with severe symptoms indicating or simulating organic disease.

Other articles in this issue are "On the Occurrence of Lead in City Drinking Waters," by Dr. William B. Mills; "Cases Illustrative of the Diagnostic Value of Examination of

the Blood," by Dr. Henry Jackson; "Some Observations on Tubercular Meningitis," by Dr. A. E. Austin.

IN THE PHYSICIAN AND SURGEON for November Dr. Carl Bonning writes of Appendicitis: Its Medical and Surgical Treatment.

The writer has had recoveries of about 80 per cent. of cases under the following treatment, without operation.

A diagnosis of probable appendicitis being made the patient is put to bed, with an ice-bag in the ileocecal region. An attempt is made to move the bowels by a laxative if they have been constipated, but if mild measures are not successful no further attempt is made.

For the relief of pain powdered opium is given, and one-quarter of a grain every hour or two, gradually reduced to a quarter of a grain every three or four hours, is usually sufficient. A hypodermic injection of morphine sometimes seems preferable to the opium.

If under this treatment the symptoms abate the ice-bag will become irksome and may be laid aside, the strict liquid diet may be gradually increased, and if no movement of the bowels has taken place by the twelfth day an enema or a dose of oil may be given.

While giving due credit to this treatment, the author thinks it is apt to result in recurrent attacks, and favors surgical interference at a convenient time between attacks. When an operation is performed the appendix should be found, if possible, and removed.

Dr. F. Maas reports a

Case of Operation for Substernal Tumor.

The patient was a multipara, forty-six years old, who had suffered for six or seven years from attacks of dyspnoea caused by a goitre.

While awake the breathing was comparatively easy, but when asleep the dyspnoea became so great as to awake the patient or to lead members of the family to arouse her.

The veins over the tumor were enlarged to about the size of the little finger, and during the operation, in spite of double ligatures and haemostatic forceps, the bleeding was very free from the entire surface of the tumor and led to the fear that the patient would die on the table.

While making traction on the mass a lobe about the size of a hen's egg was drawn from behind the sternum, relieving venous pressure, stopping the hemorrhage and exposing the great vessels of the neck on the left side.

To avoid myxedema the smaller portion of the growth on the right side was left undisturbed.

Owing to the bleeding the antisepsis had necessarily been imperfect and therefore compresses were used instead of sutures. The post-sternal pocket healed by granulation, and recovery without complication resulted.

Although exophthalmos existed in this case prior to operation, the author does not report this as a case of Graves' disease, believing the symptom due to the mechanical effect of the humor on the veins of the neck. He calls attention, though, to the fact that diarrhoea and disturbed menstruation which were present were cured. He has seen cases of undoubted Graves' disease cured by operation, and thinks all cases of goitre which cause annoyance and are not relieved by medication, or which show areas of hardening, or which suddenly begin to increase in size after a period of inaction, should be extirpated.

Other papers in this issue are "The Treatment of Congenital Clubfoot," by Dr. George S. Ney, and "The Doctor in Politics," by Dr. Frank S. Hough.

THE TEXAS SANITARIAN

for December. Dr. W. T. Baird writes of

Oxygen.

Oxygen he thinks one of the best heart tonics. The blood absorbs the gas, and the heart, being the first active muscle with which this comes in contact, is enabled to appropriate it first.

To benefit from this a muscle must be in action at the time the gas is present, and that active muscles derive increased energy from its absorption the writer points to the athlete in contrast to the student, to the wolf, cat and draught ox in contrast to the stalled ox and hog.

Wallian is quoted as claiming that no remedy has given such good results, even in organic heart disease, as oxygen, in his experience.

In preparing the oxygen the author uses the mixture of chlorate of potash and dioxide of manganese, and in administering the gas dilutes it with from 20 to 50 per cent. of air. The directions given are to inhale the gas forcibly, not oftener than once in five minutes, and the periods of inhalation are distributed as uniformly as possible throughout the day.

A series of cases is given illustrating the effect of oxygen in various kinds of disease.

IN THE BRITISH JOURNAL OF DERMATOLOGY
for December Dr. H. Leloir concludes his article on

Dermato-Neuroses and Their Treatment.

The first point to be observed in treatment of these affections is to prevent contact with the air and to avoid local infection and mechanical irritation. In carrying out this treatment exclusive dressings are prepared by spreading ointments or pastes thickly on linen and covering the whole by gloves or

wadding, or else use is made of gelatine, medicated varnishes, etc.

In the treatment of severe prurigo scarification, or else the making of numerous fine punctures with needles, is often successful where there is rapid formation of oedema or perifollicular congestion. Vasomotor constrictors, such as alcohol and alcoholic solutions of ergotin and ichthylol, are often useful, and so is counter-irritation by cautery, iodine, ethyl chloral spray, etc., along the spine or nerve tracts.

The continuous electric current has proved useful in a number of affections, particularly morphaea and vitiligo. Both the continuous and the interrupted currents may be used in treating trophic ulcers.

Electrolysis is an efficient but very painful method of treating rebellious cases of pruritus, particularly pruritus of the anus or vulva, but can only be applied to small areas. The induced current from a powerful static electrical machine has been used for the same purpose and has the advantage of not being painful.

In using the induced current in other nerves of the skin the author has had very inconstant results, sometimes finding either the nervous or the cutaneous phenomena relieved and the other one made worse; sometimes no effect on one or on both; sometimes both have been relieved and sometimes both have been made worse.

Internal treatment varies with the symptoms. Hygiene is very important, and frequently the trouble seems due to the abuse of alcohol, tobacco, carbon monoxide, and very often it will be found to be a symptom of gout, uterine, hepatic or kidney disease, etc., so that it is necessary to make a thorough general examination before excluding other troubles as the probable cause.

The author is pleased at the general recognition of his statement made fourteen years ago, that "the skin ought, in most cases, to be considered the mirror of the nervous system."

IN THE BUFFALO MEDICAL AND SURGICAL JOURNAL

Dr. Frank J. Thornbury writes of the

Pathology of Trichinosis.

The disease occurs epidemically in herds of swine, the old animals being particularly liable to the disease, and the diaphragm, neck and loins being favorite sites for the parasites.

As many as eight trichinae have been found in one capsule, but frequently they are separate.

In a few recently affected subjects the parasites were found, not yet encapsulated, in motion, and this motion was increased by the application of heat.

When too few trichinae to cause death are swallowed they bore into the muscles of the most remote parts of the body, and as 14 per cent. of the bodies examined in the Buffalo dissecting-room proved infected, the author thinks that a great many of the cases

of obstinate chronic rheumatism are due to infection with this parasite.

HARPER'S MAGAZINE.

Senator Henry Cabot Lodge contributes to *Harper's Magazine* for January a vigorous article, entitled "Shakespeare's Americanisms," which contains reassuring and comforting doctrine for those who employ colloquial forms of speech. The following passage is one of many that will be read with interest: "Among characteristic American words none is more so than 'to guess' in the sense of 'to think.' . . . One sees it continually in English comic papers and in books also, put into the mouths of Americans as a discreditable but unmistakable badge of nationality. Shakespeare uses the word constantly, generally in the stricter and narrower sense, where it implies conjecture. Yet he also uses it in the broader American sense of thinking. For example, in 'Measure for Measure' (act iv, scene 4). Angelo says, 'And why meet him at the gates and redeliver our authorities there?' To which Escalus replies in a most emphatically American fashion, 'I guess not!'"

HARPER'S WEEKLY.

Probably no other paper has more largely

influenced public opinion in America, through the views that have been expressed and the reforms that have been advocated in its editorial columns, than has *Harper's Weekly* during the thirty-eight years of its existence, and its recent political articles and signed and unsigned editorials have been conspicuous for ability and for constructive as well as destructive criticism.

HARPER'S BAZAR.

Volume xxviii of *Harper's Bazar* will open brilliantly in January with the beginning of Maarten Maarten's striking and finely illustrated novel, "My Lady Nobody," a story which has Holland for its background and some charmingly real people for its *dramatis personae*. Marion Harland will contribute a characteristic short story entitled "A Fin de Siecle Prodigal," and Harriet Prescott Spofford a piquant tale, with a whimsical New England heroine. Other features will be a paper on "House Building," from the woman's point of view, by Helen Evertson Smith, and the first of a series on "Colonial Dames," by Catherine T. R. Mathews. The fashions for January will embrace elegant toilettes for occasions of ceremony by Sandoz and Chapuis, from Worth models, and many beautiful outdoor costumes.

PERISCOPE.

IN CHARGE OF WM. E. PARKE, A.M., M.D.

MEDICINE.

On the Treatment of Tapeworm.

Leslie Ogilvie, M.B., refers (*Lancet*) to the frequency with which the parasite is treated with success, as evidenced by the reappearance of the proglottides in the evacuations after the lapse of three or four months. He thinks it is not a question of the particular drug to be used, but the method of using it, and considers the directions as ordinarily given in text-books very defective. As an antecedent purgative he prefers sulphate of magnesium with jalap, which he repeats several times before he administers the vermicifuge. The latter is given in two doses, of a dram each, at intervals of an hour. Two hours after the last dose he clears out the bowels again with a dose of castor oil and tincture of jalap. In this way he thinks he secures the most powerful effect on the worm with the least effect on the patient. He claims to have been successful in the complete removal of the parasite in thirteen consecutive cases. He considers it of importance to prepare the patient for a few days previously by dieting, and recommends the physician always to pay a visit to the patient shortly after the second dose of the vermicifuge, and to inspect himself all the evacuations, which for con-

venience he directs to be passed into a weak solution of potassium permanganate.

The Etiology of Headache.

Dr. S. Vermel (*Revue Gen. de Clin. et de Ther.*), after a thorough study of the subject, says that he is inclined to attribute all headaches to an oversensitive condition of the sympathetic nerves controlling the peripheral vessels of the cranium and brain, or to an angioneurosis. It may be asked at once, he says, how the same symptoms, from the same cause, can be present in diametrically opposed conditions, such as plethora and anaemia, febrile and apyretic diseases, for example. The idea that the seat of pain is in the cortex has not been substantiated, for when a cortex is irritated there is locally only an hallucination of pain; the real pain is exhibited on some part of the body. Then if the attack of cephalgia is not due to local irritation of the cortex, the seat of the trouble must be in the meninges. It is to dilatation of the vessels of the meninges, causing intracranial pressure, that the pain is due. The vascular dilatation extends to the minute blood-vessels in the region of the pituitary body, rupture of which gives rise to the epistaxis from which patients so frequently suffer during an attack of headache. It is

clear how this explanation answers for hyperemic conditions, but how does it account for the same symptoms in anaemia? In anaemia there is a qualitative and not a quantitative change in the blood, the amount of fluid in the vessels remaining the same. In veritable anaemia from excessive depletion of the system, as from hemorrhage or cholera, the condition is different; but from the anaemia coincident with neurasthenia, hysteria chlorosis, etc., there is, so far as quantity is concerned, the same condition as hyperaemia.

In anaemia the vessels are very prone to dilatation, producing an exaggeration of the intracranial pressure, in consequence of over-excitability of the vasomotor centers allowing of local hyperemias.

The author definitely states that the seat of pain in headache is always in the dura mater and not in the cortex; that the pain is provoked by the compression of the dura mater produced by increased intracranial pressure; and that this is true of all headaches, whether neuroses or of toxic or mechanical origin—such as diseases of the brain or of the meninges, constipation, etc., or of reflex origin.

PATHOLOGY.

Experiments on the Inoculability of Cancer.

Dr. Grati, at the meeting of the Paris Academy of Medicine, said: In connection with Dr. Lienaux, *agrege* at the State Veterinary School, I have carried out a series of experiments in order to throw light, if possible, on the moot question of the inoculability of cancer. We have made use of both grafting and inoculation. We grafted fresh cancers on the skin, the peritoneum and the wall of the stomach; in all but one case we obtained immediate union. For inoculations we employed fresh cancer juice obtained by scraping or rubbing primary and secondary tumors. This juice, either pure or diluted with sterilized broth, was injected in doses varying from one-fourth to one-half cubic centimeter or more, choosing by preference for such inoculation those organs which are most frequently attacked by cancer. The results of our endeavors to transmit cancer from dog to dog or from man to dog were invariably negative, both with regard to grafting and inoculation.

The conclusions at which we have arrived from our personal researches are that under similar conditions cancer does not appear to be inoculable, even between individuals of the same species.

Taking into account all the facts actually known, we think the following deductions are justified:

1. The parasitic nature of cancer has not been satisfactorily proved.
2. The direct or indirect contagiousness of this neoplasm has not been proved, the most that can be admitted, in the present state of our knowledge on this subject, being the possibility of ingrafting, that is to say, transplanting cancer, and that principally on in-

dividuals exhibiting exceptional predisposition, such as cancerous patients themselves, for instance.

3. The etiology and pathogeny of cancer are still undetermined.

OBSTETRICS.

The Conduct of Ordinary Labor Through External Examinations Solely.

Drs. Leopold and Sporlin (*Med. News*) make a warm plea for limiting examinations made in the course of ordinary labor to the external parts, and adduce the advantages of such a course. Infection is thereby avoided, the natural sense of modesty of the parturient is not offended, and careless rupture of the membranes is avoided. Skill in external examination is acquired with reasonable readiness. In the large majority of cases such examination alone is sufficient for the recognition of the position and presentation of the fetus and for the study of the course of an ordinary labor. As there can be no objection to its frequent exercise, abnormalities of parturition may the more readily be detected early and means of correction be promptly employed. Experience soon teaches the difference in the position of the fetus assumed in case of pelvic contraction on the part of the mother. The position and presentation having been recognized by external examination, internal examination for the determination of possible pathologic conditions of the birth canal need be but brief, and can be conducted with great care. For the attainment of this desirable result it is essential that the obstetric pupil familiarize himself thoroughly with the conditions of normal labor as determined by physical external examinations, as well as with the physiology of normal labor. Obstetric operations are principally to be taught upon the phantom.

SKIN DISEASES.

The Treatment of Eczema.

Malcolm Morris, in a paper read before the Dermatological Section of the British Medical Association, treats on the management of eczema. With regard to internal medication, the less the better. In an ordinary chronic eczema, when the health does not appear to be affected, he relies entirely on local treatment. In acute inflammatory lesions antimony is of great value, beginning with ten to fifteen minims of the wine of antimony and repeating the dose in an hour, and if need be two hours later, then gradually reducing to six minims three times in twenty-four hours. With regard to local treatment, he treats every case as if it were of parasitic origin. The best remedy in dry chronic eczema, especially of seborrhoeic origin, is sulphur, and next to that resorcin. He begins with ten grains of precipitated sulphur or of resorcin in an ounce

of zinc ointment, gradually increasing the amount of parasiticide. When the inflammation is acute ichthyl is especially useful. When there is much discharge he washes the part with a weak solution of boracic acid, and afterward dries it with muslin bags containing starch and boracic acid or flour mixed with boracic acid. Chrysobrin has been successful with very persistent chronic eczema of the flexures.—*Boston Med. and Surg. Jour.*

DISEASES OF THE EAR.

The Necessity of Protecting the Ear in Bathing.

Bathing without properly protecting the ears will not infrequently bring about an otitis media, and also other affections of the ear have been attributed to it, and as these affections can be prevented by very simple devices the attention of the public should be drawn to the matter. Dr. Laurence Turnbull, of Philadelphia, has drawn attention to the fact that if the water which has entered the ears in bathing is not removed (which can be done by leaning the head on one side and drawing the external ear forcibly outward, at the same time shaking the head and opening the mouth, also striking the ear with the palm of the hand) inflammation, followed by perforation of the membrana tympani, may occur in consequence of the decomposition of the water. Or the suppurative process may pass to the middle ear, cochlea and labyrinth, destroying the organ of hearing and even implicating the brain. A large number of diseases of the ear are attributed to sea-bathing, that is, bathing too frequently and remaining too long in the water. Exostosis of the meatus is particularly common in persons that indulge in the "header." The ears, especially if they are tender or diseased, should always be protected in bathing. Dr. Turnbull advises that ladies should wear an oilskin cap covering the ears and men should close the external meatus with a piece of cotton or other simple plug, which may be removed after leaving the water. This precaution is particularly advisable for surf-bathing and when floating on the back.—*Med. Review.*

NOSE AND THROAT.

The Asthmatic Nose.

The exaggerated ideas of the importance of nasal reflexes, as formerly held by many specialists, have led the more conservative general practitioner to doubt the existence of any relation between the nose and any pronounced disturbance of function in other parts of the body. The part played by the nose in the various forms of asthma has been so clearly demonstrated by some of our ablest authors that no reasonable excuse can now be given for neglecting a careful examination in these cases.

Many theories have been advanced as to how the disturbance is produced, and as to

just what pathological condition in the nose is necessary to produce it.

Where there is sufficient hypertrophied tissue to produce pressure upon the septum, or, on the other hand, where the septum deviates sufficiently to impinge upon the turbinates, we are most likely to have some reflex disturbance which may manifest itself in an attack of asthma or an irritability of the larynx. That there are other causes for asthma it is impossible to deny, but that there always exists a certain well-defined relation between nasal diseases and what is commonly called hay fever is just as certain. From the experience we have had with these we are inclined to believe that the middle turbinate is the *sine qua non* in the production of this disease. In all cases we have seen there has been marked disturbance in the region of this body, with pressure caused either by hypertrophied tissue or enlargement of the bone. Just how this pressure causes a disturbance in the respiratory function, and why it should be perennial in its occurrence, are questions of much uncertainty. Pollen of the different autumn plants and dust are regarded as very doubtful factors in bringing on the attack by some of our most eminent observers. The peculiarity of a regular occurrence at almost exactly the same time each year suggests the probability of some mental influence. However this may be, a slight operation in the nose previous to the expected attack often delays or entirely prevents its occurrence.

Where polypi or other growths exist their removal often results in permanent benefit. The success which has attended careful nasal treatment in asthmatic cases seems at least to promise a better understanding and a more scientific management of such cases.

During an attack of hay fever, frequently repeated and prolonged douching with hot water gives most satisfactory relief. The edema seems to disappear and then follows a most agreeable sense of comfort. Cocaine produces temporary relief, but the secondary effect is really to increase the edema. Weak solutions of atropine sprayed into the nose will often relieve local symptoms. Local treatment alone is not usually sufficient in these cases. Some attention must be given to the general condition of the patient. The syr. hydroiodic acid has been highly recommended, and we have found it very satisfactory in these cases. Strychnia in one-thirtieth-grain doses is also a valuable adjunct to local treatment.—*Kansas Med. Jour.*

HYGIENE.

The Clothing of Infants and Children.

The following sensible directions are given for the dressing of the child at birth by Dr. T. W. Peers in the *Kansas Medical Journal*:

1. A square of absorbent cotton five to six inches square, with a hole in the middle, is adjusted smoothly round the umbilical cord and the latter turned up toward the chin and covered with a second piece of absorbent cotton without a hole.

2. A soft flannel band around the child's body which will reach from the nipples to the crest of the ilium, and pin it in front with small safety pins.

3. A diaper of soft cotton or cotton flannel; not unwashed, harsh new goods.

4. A soft flannel gown, made with sleeves, but no waist, and about one yard in length, open the full length in front and tied with tapes or buttoned.

5. A dress of silk, tennis flannel, figured woolen goods or unstarched linen, according to the weather, fancy or purse of the mother, made similar to the above gown or with a waist if preferred, a few inches longer and with larger sleeves.

When the cord has come off and the stump thoroughly healed the flannel band should be left off. At five to eight months, when the baby gets to kicking and short clothes are indicated, the following dress is suggested:

1. A flannel shirt reaching to or below the pubes.

2. Diapers.

3. Woolen stockings reaching well up above the knees.

4. Shoes with a wide, strong sole and plenty of toe room.

5. A well-fitting waist of cotton goods, to which is attached the garters and a flannel skirt. Ring garters should be avoided.

6. Later, when the child learns to attend to the calls of nature, the union garment, which includes shirt and drawers woven in one piece, is a very desirable article of clothing.

Bicycle Exercise for Women.

Dr. Laura Liebhardt states (*Woman's Med. Jour.*), regarding bicycle exercise for women, that "the majority ride with the saddle too low," and that this is responsible for cramping of the chest, straining the back and impeding full action of the muscles of the leg. There results a constant tension of the muscles above the knee, which gives a short, awkward stroke, as the reach is too short. The seat should be amply high for the entire leg to be extended and give to these muscles a second of relaxation on the downward stroke of the pedal. The knee must have perfect freedom, and in this respect a woman finds herself particularly handicapped, as she is unable to make the entire stroke with the action of the knee limited by a dress skirt. In Paris they do not stop with the unsightly bloomers, but have almost universally adopted the practical, yet far too radical, knickerbockers. This striking costume attracts but a passing notice, for the rationale of it all appeals to the French mind; but as the United States has fortunately not yet reached the

Parisian standard, it is to be hoped that knickerbockers will confine themselves to spins in the mountains. Wheelwomen also subject themselves to needless jars by jumping instead of gliding from the wheel. They should be taught to mount and dismount from either side as men are wont to do. Corsets on the wheel, as elsewhere, should be denounced in the strongest terms, although nearly one-half of all wheelwomen tie up their muscles in this barbaric fashion. Many condemn cycling on the ground that the movements are identical with those called forth in running a sewing-machine. Machine-running simulates more the faulty way of wheeling, and the position is almost identical with that assumed when the handle bars and saddle are placed too low. In wheeling there are a greater variety of movements and less tension. Two-thirds of all women who ride wheels foolishly incur great risks by riding during certain periods, even to the extent of hill-climbing, when they should never mount a wheel, except for short distances, during the first two days. During the Nebraska discussion the general opinion was that the saddles in use were hardly proper. The long, wide saddle suspended between springs was considered very much superior to the rigid or hard models. A saddle much wider throughout was considered desirable, and cases were quoted to substantiate this claim.

ARMY AND NAVY.

CHANGES IN THE U. S. ARMY FROM DECEMBER 23, 1894, TO JANUARY 5, 1895.

The order assigning Captain James D. Glennan, Assistant Surgeon, to duty at Fort Snelling, Minnesota, is revoked. The order assigning First Lieutenant Henry A. Shaw, Assistant Surgeon, to duty at Fort Niobrara, Nebraska, upon the abandonment of Fort McKinney, Wyoming, is so amended as to direct him to report for temporary duty at Camp Merritt, Montana, and upon the completion thereof to proceed to Fort Snelling, Minnesota, for duty at that post.

Leave of absence for one month on surgeon's certificate of disability, with permission to leave the limits of the Department, is granted First Lieutenant James M. Kennedy, Assistant Surgeon.

Leave of absence for one month, to take effect about December 24, 1894, is granted Major Robert H. White, Surgeon.

The leave of absence on surgeon's certificate of disability granted Major Washington Matthews, Surgeon, is extended four months on surgeon's certificate of disability.